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SEEDING MEADOW AND PASTURE LANDS.

The grass crop of the West constitutes one of the most valuable and important among the crops adapted to Western cultivation.

The districts bordering upon the Western rivers, supply the immense quantity of hay that is consumed in the towns and cities, from their head-waters to New Orleans. And from the pastures of many of the interior counties, large droves of cattle are annually reared and fattened, to feed the millions in the cities of other States.

We think there is room for improvement in preparing, seeding, and in the treatment of our grass lands, as well as of our other staple crops.

We have, in cultivation in the United States, some extremely valuable kinds of grasses, yet they are few in number, in comparison with the superior grasses of Great Britain; nor do we believe that the number could be increased with us, to the same advantage, that is derived from them in England.

It is asserted that upwards of two hundred varieties are grown in Great Britain, most of them indigenous. Some idea of the great variety to be found in their natural pastures, may be formed from the fact, that in a simple sod, taken from a rich pasturefield, were found upwards of thirty varieties of grass. Mr. SINCLAIR expresses the opinion that, in the rich pastures, there are usually twenty-six, or more, varieties. For pasturage there are some advantages in growing a variety of good grasses on the same land, where the soil and climate are adapted to them, because a more permanent and uniform pasture is maintained throughout the season; for some varieties will still be luxuriant, while others are out of season, and a variety is calculated to improve the appetite, and to promote the health of the animals fed upon it.

Many of the varieties of grasses most valuable

in England, have been tried in our country, but from some cause, they have not been extensively cultivated.

In Great Britain, the proportion of meadow-land is nearly two-thirds of the whole surface. In Germany, the proportion is estimated at one-fourth. In other countries of Europe the proportion is less.

In the Eastern States of our Union, the practice is similar to that of England in the treatment of grass lands, where the improved system of rotation is maintained, but on the river bottom lands of the West, our farmers do not generally practice that thorough system of rotation best calculated to promote a constant improvement of the soil, but the lands are often kept in grass, until they are over-run with wild growth, or until they will no longer yield a remunerating crop of hay. In our hot, dry climate, the grass lands do not become so compactly set, or so permanently established, as in the cooler and more moist climate of the Eastern States, or of England; and hence our meadows are more liable to be over-run with weeds. These facts should prompt every farmer to prepare his lands, and seed them in the most thorough manner.

The following varieties of grass are, by common consent, admitted to be the most valuable now known to us: Timothy, (*Phleum pratense*), Orchard grass, (*Dactylis glomerata*), Red Top or Herds grass, (*Agrostis vulgaris*), Kentucky Blue Grass, (*Poa pratensis*), Red Clover, (*Trifolium pratense*), which last may also be classed among the grasses, and is recommended as an indispensable part of an improved rotation of crops.

TIMOTHY.—The principal variety of grass which is depended on for hay by our Western farmers, is Timothy.

PREPARATION OF THE LAND.—The quantity of

hay that may be raised upon an acre, depends much upon the manner of preparing the land. If it is naturally wet, it should be drained. All the old stumps, that can be taken out, should be removed, and the ploughing should be deep and thoroughly done, and the surface finely harrowed and well rolled.

SEASON OF SOWING.—The time for sowing must vary according to circumstances. Too many of our farmers are in the habit of deferring this work until a late period in the Spring, and then sowing the seed upon land occupied with a crop of small grain; this should never be done when it is possible to avoid it, for it often occurs, that owing to the dry weather which follows, much of the seed fails to vegetate, or if it comes up, the young plants are liable to be burned out by the summer sun.

In order to insure the greatest success, the seed should be sown in the fall, and as early in September as the rains may render the ground in good working order. If circumstances prevent, the sowing may be delayed until the last of the month, and in favorable seasons, it has been known to do well when sown as late as the tenth of October, but when the work cannot be done by that time in the fall, the sowing should be deferred until February. Either sow at this time, or in the fall—it should not be sown with any other crop. If the ground is properly prepared, and the seed sown in due time, a full crop of hay may be cut the first season.

For fall sowing, the new crop of seed is not always in market, but it is better to buy the seed and keep it over the summer, than to defer the sowing until spring.

Timothy seed, that is to be sown the coming spring with grain, should, if possible, be sown as early as March, so that the young plants may become sufficiently rooted, before the dry, hot weather of summer occurs. The quality of the seed is too often condemned, when a failure to grow should be attributed only to late sowing.

QUANTITY OF SEED.—Never less than one peck of seed should be sown upon an acre, although our Western farmers are usually satisfied with sowing half this quantity; but, unless the field is well set with Timothy, weeds will come in and occupy the ground, much to the injury of the grass.

Farmers in the Eastern States, and in England, sow from half a bushel to one bushel of Timothy seed to the acre.

ORCHARD GRASS.—This grass is rapidly gaining favor among the farmers; with a mixture of

clover, it is preferred by many for hay, to any other kind of grass; and for grazing, it is ten or twelve days earlier in the spring than any other variety. When eaten down, and the stock turned off, it is speedily restored again, as it is a most rapid grower. Owing to its abundant and long roots, it withstands severe drouths better than any of the other grasses. It never spreads like other varieties, but in order to insure full possession of the ground, to the exclusion of wild growth, the seed must be sown thick.

PREPARING THE GROUND, AND SOWING THE SEED.—The ground should be well prepared, as for Timothy or flax, as early in the spring as the land can be worked. Mark the land off, in suitable widths, for a cast of light seed, and in order to secure uniformity, sow one half of the quantity one way, and the remainder across the first sowing. Apply not less than *one and a half* bushels of seed to the acre; and in addition to this, sow about *three* pints, or two quarts, of clover seed to the acre, but it should not be mixed with the Orchard grass seed—it should be cast separately. A light brush, or roller, run over the ground, is all the covering the seed will require. Some farmers sow the seed immediately after the harrow, and leave it to be covered by the rains.

KENTUCKY BLUE GRASS.—This grass, which constitutes the glory of Kentucky pastures, is regarded superior to all others for grazing, and what adds more to its great value, it grows with such luxuriance on lands necessarily retained for timber, which, without the grass, would yield no annual return beyond the value of the timber removed from them.

The system of converting these woodlands into productive pastures, was introduced into Kentucky, in the counties of Benton, Clark, and Fayette, fifty years ago, by emigrants from the south branch of the Potomac. This system extended gradually, until it embraced a considerable portion of the State, and it is now beginning to constitute an important feature of farming in many other States. It is equally applicable to all the rich calcareous soils of the West; and we hope soon to see the undergrowth in the majestic forests of Missouri, and other States removed, and the lands yielding rich returns from these unrivalled pastures.

PREPARING THE LAND, AND SOWING THE SEED.—Where timber is an object, the important point to be considered is, to admit into the enclosure the greatest amount of sun, consistent with the preservation of the valuable portions of the timber. Various methods have been adopted in

Kentucky, according to circumstances, in preparing these woodland pastures; some cut out the undergrowth and fire-wood, and then sow the seed; others belt the timber one season, and clear out the undergrowth, and then sow the ensuing winter; this latter method is the most expeditious, and requires the least labor. After the undergrowth is removed, the leaves should be gathered up, so that the seeds may come in contact with the moist soil; some gather and burn it, but we prefer to gather it into heaps, and let it lay upon the land. This may be done, and at the same time leave the ground in the best possible condition to receive the seed, by the use of a scraper. This is made in the following manner: take a piece of plank, five or six feet long, and about two feet wide, insert therein, at right angles, a common ox-tongue, and attach one yoke of oxen and one horse to it. With the aid of one man, six or eight acres can be scraped over in a day, jumping the most of the logs with ease. The leaves are gathered into piles, leaving the surface of the ground clear and smooth, and ready for the reception of the seed. It is best to have one man follow, and sow the seed as fast as the ground is cleared. The seed may be sown at any time from November to April; but the best time for sowing is in January or February, and under the operation of the weather, the seed will penetrate the earth more readily, and it will vegetate the first season.

QUANTITY OF SEED.—From ten to fourteen pounds of cleaned seed should be put on an acre. Some farmers add to this three or four pounds of Timothy seed.

Blue grass is very delicate the first year, and it should be sparingly pastured until it has gone to seed, or it is liable to be pulled up with the roots.

Blue grass is an excellent renovator for open, worn lands; when sown upon cleared land, a mixture of Timothy and Clover seed, in the proportion of three or four pounds of each, to ten or twelve pounds of cleaned blue grass seed, is preferred. The advantage resulting from this is, it secures at once a well covered pasture, that will bear a considerable grazing the first year; the blue grass will soon expel the clover and timothy, and take full possession of the ground. Open grounds are usually sown in March, upon wheat, rye, or oats.

The further treatment of meadow lands, and the proper rotation of crops upon the river borders, necessary to precede the renewal of these meadows, will be the subject of an article in our next number.

IMPROVEMENT IN MEADOW AND GRAIN LANDS—STUMP MACHINES.

The great saving in labor, from the successful introduction of Mowing and Reaping machines, is not the only benefit that is likely to result from them. Many of our farmers are too indifferent and careless in preparing their lands for grass and grain. A small additional amount of labor in cleaning the stumps and rubbish from the fields, and in more thoroughly plowing, rolling and harrowing their lands, would be doubly compensated by the consequent increase of crops, besides the satisfaction and pleasure a neat farmer would derive from seeing his lands well improved and cultivated, and yielding the greatest possible return.

In our annual travels through some of the older States, and particularly through that part of New York embraced within the wheat growing region of the Genesee valley, we are often struck with the wide contrast between the manner in which the farmers there prepare their lands for wheat and grass, and those in the west. We are aware of the many difficulties with which the new settler in a new country formerly had to contend. Then he could not always command the necessary farm help, nor had he the improved farm implements to aid him in his labors that are now within his reach; and above all, the price of farm products and the facilities for conveying their crops to market, would not warrant the same amount of expenditure that at this period would prove most profitable. The operation of these causes have led to many loose and slovenly habits, which under the present state of improvement in farm machinery, and the advanced price of every variety of farm produce, should lead to speedy improvement.

The introduction of mowing and reaping machines is destined to become almost as general as the plow, or any of the common implements of the farm; but neither of these machines can be used to the greatest advantage and economy without a proper preparation of the field. All the stumps that can easily be taken out should be removed, the land well plowed, and the surface made smooth and fine. The recent introduction of several STUMP PULLING MACHINES is destined to do much toward the improvement of fields and meadows in this respect. Some of these machines are extremely simple, and can be procured by any farmer.

There are thousands of acres of land covered with stumps, each of which render valueless nearly a rod of ground, offering serious obstructions to the plow, harrow, and the mowing and reaping machine, as well as affording pro-

tection to thistles and briars, or an unbroken sod. Many of these stumps which would remain unrooted for an age to come, may by the use of one of these machines, be easily and very expeditiously taken out.

One of the most powerful of these Stump Extractors was patented by William W. Wells, of Orange, Mass. This machine is a combination of several mechanical powers, and one of the largest of them is capable of exerting directly upon the stump a power equal to from 112 to 326 tons, according to the manner in which it is used, which is sufficient to remove almost any stump to be met with.

The editor of the New England Farmer, who witnessed the operation of this machine, says: "The hook of a stout chain was placed under a moderately sized stump, and it was turned out with as much apparent ease as though it had been a mere log with no attachment to the ground. Other stumps of still larger size and more extensive roots, were taken out, all with certainty, occupying in removing each one, after the chain was applied, not exceeding ten minutes!

"At length a larger chain was attached to an enormous stump, the growth, perhaps, of centuries. With a small, half circular spade, room was made under one of the roots, and a stout hook attached, the chain passing from the hook over the end of the shears. Nearly the whole surface of the ground about the stump was covered with the stumps of a later growth of young pines, whose roots penetrated the soil, and mingled with those of their ancient progenitor.—The stump itself was between two and three feet in diameter, and sound—as were its roots.

"A yoke of stout oxen was hitched to the lever and driven forward, the roots in the mean time cracking and making a noise like a pistol exploded under water. The ground gradually rose about the stump, and in ten minutes its gnarly roots which had securely laid there for ages, were brought to light! At the expiration of ten minutes the old hero was fairly turned over. Upon actual measurement, we found the roots extended something more than sixteen feet from each side of the stump."

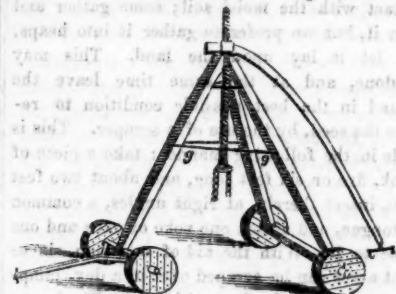
We have seen this machine employed in removing an immense wooden storehouse, which seemed to manage it with as much ease as a yoke of oxen would an empty cart. The price of this machine complete, is from \$125 to \$150.

But the cheapest and most simple stump extractor that we have ever seen was described to us at the late New York State Fair. It is illustrated and described by F. Lucas, of Castile,

New York, in the *Country Gentleman* of December 13th, 1855.

SCREW STUMP MACHINE.

The screw is of wrought iron, 10 feet long, and 3 inches in diameter, with threads three-fourths of an inch apart, square cut. The frame consists of three posts as seen in the figure, 7 or eight inches square at the bottom, and 10 or 11 in the middle, joined together at the



top, and secured by a strong band of tire iron. Each post is hollowed at the top before it is put together, to give place for the screw. The bar posts are 13 1-2 feet apart at the foot, and 14 feet long; the forward post is 14 1-2 feet long, and stands 14 1-2 feet from the others at the bottom. It is fastened to the forward axle by a strong bolt firmly fastened into the post, and setting into a hole in the axle. The forward axle is usually 3 or 4 feet between the shoulders—the hind one 14 feet between the shoulders; the braces *g. g.* are fastened to the back posts, and pass around the front one, to prevent sliding out at the bottom. The wheels are made of 4 inch white oak plank, doubled and firmly pinned together, making a wheel 8 inches wide. The nut is moveable and fastened to the lever by two straps of iron. The screws are cut left hand.

Fig. 2 represents the manner of fastening to the stump. First dig around one of the main roots, pass the chain under it, and pass a strong chain loosely around the top of the stump to prevent the stump from tipping too much while pulling. The large chain is usually of 1 1-2 inch iron; the small one of 3-4 inch iron.



A yoke of oxen and one horse are the team necessary for working one of these machines. With the oxen they are easily moved from one stump to another. It is in every respect superior to any other machine for the purpose.—Once made, if made as it should be, it needs no repairs of any amount, and will pull the largest

pine stumps with the greatest facility. The screw may be obtained at almost any large iron factory, and any ordinary workman can do the framing.

We would suggest in using these machines, that blocks be kept at hand and placed under the axle on the line of the posts to relieve the axle from the weight.

CULTIVATION OF THE LOCUST UPON THE PRAIRIES FOR TIMBER AND FOR SHELTER FROM THE WINDS.

The common Locust, (*Rubinia pseudacacia*) is a timber of great solidity and durability, and one of the most valuable kinds for posts, fencing, ship building, railroad ties, &c., of any variety found in the forests. It is of vigorous and rapid growth, and succeeds on almost any soil, from a light sand to a heavy loam. The only drawback to its extensive and general cultivation, is its liability, in some locations, to the attacks of the borer.

There are many farms upon our Western prairies that are either deficient in timber or entirely destitute; there are also thousands of acres of valuable prairie now lying unoccupied from the want of timber for fencing and other domestic purposes. By proper management the locust may be grown with little labor and expense, not only producing a valuable timber, always commanding the highest price, but groves may be so formed as to serve a most desirable end in breaking the rough blasts of winter from the dwelling, the outhouse, and the fields and crops upon the farm.

Method of Cultivation.—The seeds of the locust, like many other of the leguminous family, do not vegetate readily, owing to the impervious nature of the shell and covering, unless they lay over one season in the ground, or are properly prepared before planting. If the seeds are new, the following treatment will cause them to vegetate as readily as the garden pea: Place the seeds in a vessel and cover them with hot water, (not boiling), let them stand two days in a warm place, then turn off the water and mix with the seeds about four or five times as much sand and place them in a box exposed to the rains and frosts of winter and spring. About the middle of April sift the sand from the seeds and plant in a well prepared soil, about one inch deep, in rows three or four feet apart, so as to admit the passage of the cultivator between them. By fall, if the trees are properly cultivated, the trees will be from three to six feet high. The following spring prepare by plowing and harrowing the ground well where it is desired

to establish the grove or belt of timber; lay off the ground with a plow in rows six or eight feet apart. Dig the trees carefully, cut off one-third or one-half the length of their tops, and lay them into the furrows, putting the root of one close to the top of another, covering the roots eight inches deep, letting the tops gradually rise to within one inch of the surface at the end. When planted in this way several shoots will come from one tree laid down. The first and second year the ground should be plowed and kept clean from weeds, after which the plowing may be discontinued. In four or five years some of the trees will be large enough for fence poles, and when they stand too thick the larger ones may be cut out for use. If this plan was generally adopted upon our prairies it would be but a few years before the whole aspect of the open country would be improved, and the value of the land greatly advanced.

HOMINY MILLS.

Hominy is one of the staple culinary articles of the West. It was formerly prepared by a very slow, tedious process by hand. At a later period mills were employed to grind it, which created quite a demand, and afforded a supply for our city markets. These means of preparing hominy, were not altogether adapted for the purpose, as they required the corn to be wet, in order that the hull might separate freely from it. When it was prepared in this way, in large quantities for market, it required considerable care and trouble to again dry it, to prevent fermentation and loss. In 1852, James Hughes, of Cambridge, Indiana, invented a very simple machine for hulling and beating hominy, which accomplished the work very perfectly, without the necessity of wetting the corn; but this machine required the operation of the mill to be stopped, in order to remove the hominy from the beating cylinder and to replenish it again. Recently a patent has been granted to EZRA FANNEY and assigned to JOHN DONALDSON, of Mount Morris, Ogle Co., Illinois, for a hominy machine, embracing the leading features of HUGHES' machine, with an improvement, which renders it capable of self-feeding and discharging, so that when the large hopper is once filled, it requires no further attention but to replenish the hopper as occasion requires. The machinery being so adjusted, that when set in motion, it will perfectly hull and break the corn, when by the operation of a cam, an aperture in the cylinder is opened, and the contents are discharged, and the cylinder is again filled, and the work proceeds as before.

OUR HOUSE.

In the November number of the Valley Farmer we gave a short article on building houses, which was copied with approbation into some of our Eastern agricultural journals. Since that time we have completed and moved into a dwelling house a little out from the city, which has such a farmer-like construction that we deem it proper to give our readers a statement of its arrangement. Our object in doing so is to assist such as are contemplating the erection of dwelling houses in the arrangement of convenient, comfortable and healthy houses. Health, comfort and convenience! These are important ends to be attained.

Our house is 32 by 40 feet out side, one story high, 11 1-2 feet ceilings, 13 feet walls, 9 inches thick, made of brick, with a tolerably steep roof. It is set 4 1-2 feet above the soil, to be above moisture from the earth. The cellar is under the whole house, divided by a thick wall; one side is devoted to wood, coal, &c., the other side to vegetables, groceries, and such things as are required for the kitchen. The main floor is divided into four principal rooms and a hall. On the right as we enter the hall are the parlor and living room with sliding doors between; the parlor 16 feet square and the living room 14 by 16. On the left are the dining room and kitchen; the first 14 feet by 16 and the second 14 feet square. The rooms are all finished alike; the windows are hung with weights and let down from the top for ventilation. A space of nine feet is taken off from the back end of the hall; the first five feet is for a bath room with two doors, one from the hall, a sash door, set with ground glass; the other from the living room. The next four feet, next to the back wall, is divided crosswise, making a pantry for the kitchen and a clothes room or closet for the living room, each four feet by three and a half. Twelve inches by thirty-six are taken off of one end of the bath room for a cupboard for the kitchen, which affords a capital place in the bath room for a fixed wash stand at the side of the cupboard and exactly length enough for a six feet bath tub. The chamber stairs ascend from the dining room door on the left side of the hall, and the cellar stairs descend under them from the kitchen door. Opposite the kitchen door from the hall is an outside door leading towards the garden and barn. Two-thirds the way up the chamber stairs is a platform and a turn in the stairs. The ceiling over the bath room, pantry and closet is dropped down to a level with this platform, affording a small bed room 7 by 9

opening from the platform. On either side of this is a low, dark room, under the roof, for trunks, boxes, rubbage, &c. At the right of the hall up stairs is a chamber 15 by 16 feet, with 7 feet ceiling; at the left, one 14 by 15, with a large closet under the roof. The front end of the hall up stairs is cut off for a closet. The front door is set in, two and a half feet, forming a recess, and behind the door is a hat and cloak closet two feet by two and a half. The dining room has a large cupboard at the right of the chimney. The house then, has six large rooms, a hall 7 feet by 18, a bath room, pantry, two cupboards, four closets, two waste or lumber rooms, and two cellars. The cost of such a house is not far from \$2,400, with cisterns and water works attached, about \$2,700.

Let the reader begin at the commencement of the statement and draw a plan of it as he proceeds, and he will readily get a distinct idea of the house.

With an addition consisting of one or two rooms, running out from the kitchen, with a back kitchen and a sleeping room or two, it would make a very convenient farm house. The expense might be considerably reduced by saving the recess, the pulled windows and the banistered stairs. A house cannot well be more convenient, as wood, water, pantry, cupboard, kitchen, dining room and living room are as near together as they can be brought.

THE P. O. DEPARTMENT.—We learn from the proper source that the Post Office Department for 1855, ending June 30, falls short of paying its expenses by about two and a half millions of dollars. The increase of income over the last year or the year before has been about \$350,000. There has been added 3,700 miles of post road. It is probable that the immense amount of franking done by government officers, if paid for would make up the deficit. The post office no doubt does business enough to pay its expenses at the present rates of postage.

MORE SHORT-HORNS IMPORTED.—Mr. Thorn, of Thorndale, Dutchess county N. Y., has recently imported from England, three Short-horned bulls and one cow. For the best bull he gave \$5000, for the cow \$3000. Two of the bulls are of the "Duchess" blood, the other, of Mr. Booth's raising. Every such importation is good for the stock of this country. It does good by introducing new blood, and by inducing greater care and attention to the raising of stock. Much depends upon the manner of raising.

AGRICULTURAL IMPLEMENTS.

Among the improved implements which have been used in Missouri, the past year, and which have given general satisfaction wherever tried, we must place Randall & Jones' Hand Corn Planter first on the list. Our judgment with regard to the superior value of this machine, is confirmed by that of some of the best agriculturists in the State. Among others, the Agricultural Society of Howard County, where its value has been proved by experience, judged it worthy not only of a premium, but a special Diploma, in which the Committee say "that they consider the invention one of the first practical utility to the farmer, and one of the greatest labor-saving machines of the day."

In our January number last year, we had the pleasure of announcing to our readers that we had just seen it, and gave our first impressions of it. In the February number we gave an accurate description of it, and its manner of putting in the seed, and the proprietor of the patent for this State issued his advertisement in which he made the most liberal promises respecting the amount and quality of work it would perform. It has come up to his promises, so say some of our most respectable correspondents. We learn that over two hundred were sold in this State last year, most of them to the readers of the *Valley Farmer*. Nearly all have been heard from. We have seen their letters, and they unite in giving the most decided testimony to its great value. Some of this testimony our readers have already seen in the May and Sept. numbers of this journal, the other testimonials with hardly an exception, are of the same tenor. We consider this to be now a tried and proved machine, its character is established, and, as several of the farmers have said, "it must soon become a common farming implement."

We are happy to state also, that while it worked so well last year, and was even declared to be "perfect in its principle," it has been improved in some of its details and workmanship. The proprietor and inventor have taken great pains to ascertain and remedy its defects and to make it as perfect as possible. Dr. Leigh has furnished us with a statement of these improvements which will be found on another page. "The Improved planter" is now before us. It looks and works admirably and we can commend it to our readers with entire confidence.

Of all the pursuits of life there is not one so conducive to health and true happiness as that of agriculture.

PLOWING BY STEAM.

We are glad to learn that the experiment of plowing by steam, has been completely successful. The first trial of the kind ever made was near Baltimore, at the late cattle show of the Maryland Agricultural Society.

Four large turf plows were attached to the machine, and it moved off throwing up furrows about fourteen inches deep. The plowing was remarkably well done—the furrows being evenly cut and smoothly laid over.

Mr. Obed Hussey is the inventor, and the highest premium and a diploma were awarded to him.

He was also the first inventor of mowing and reaping machines, and many other useful inventions.

The power of his machine was severely tested. It steamed itself out to the show ground, over a rough and hilly road, a distance of 2 1-2 miles.

The steam plow is what we want on our western prairies. The farms at the east are too small, and the soil too light for them to come into successful operation there. But on our broad and fertile prairies, they will come into general use, and be a source of great profit to their owners. They will plow deep or shallow, fast or slow, early and late, and without making any complaint.

After the above was in type, one of the regular contributors to our journal handed in the following article, attached to the description of the experiment we have noticed. The sanguine and enthusiastic manner in which our contributor speaks of the Steam Plow, induces us to give place to his article also in this number:

The Steam Plow! that is just what we have been looking for for years. We have expected to see the steam engine steaming through the plow-field. Why not?—once we had no engine. The ingenuity of the mechanist gave us this marvellous wonder of the age. Then to make it work was the next thing. A little more skill and experience, and it obeyed its master, and turned the mill-wheel. Then if it could turn a mill-wheel, might it not work the oars of a boat? FULTON said it would. He touched it, and lo! it sent leviathan boats up and down all our rivers. Prodigious skill! prodigious power! But this was not enough. Might it not take to itself feet and legs and walk like a giant horse on land? A little more skill and experience and lo! the iron steed came forth, tamed, harnessed, obedient from his stable; and now his progeny tramp on every soil, gallop over every State, and travel swiftly over every continent. What next?

May not this horse be harnessed to the plow? A little more skill and experience, and what hinders? If he can grind, sow, spin and weave, paddle and draw loads, can he not plow? Look out for him farmers! He will come into your fields by and by. Pull up the stumps and make ready. Let the poor jaded horses have a jubilee. Not flesh and blood, but iron and steam shall plow by and by. The broad furrows shall lay over without the strain and sweat of sinews and muscles. Iron and Steam! what will they not do? By and by, they shall do much that they do not yet. The car of progress is moving. Genius and skill and experience are on board. What they will bring along, no man knoweth. These are the days in which we may hope for everything.

IMPROVED FARMING.

The method of farming that has heretofore been generally adopted in this country, was to cultivate that kind of crop which gave, temporarily, the most profitable returns, utterly regardless whether, by a succession of exhausting crops the soil became impoverished or not. Indeed, it was not, until of late years, even thought necessary to aid its fertility by a regular system of rotation of crops, or the annual application of manures. The manner was to crop it as long as a particular kind of grain would be made to grow, in a given field, and when every particle of fertility was at length extracted from the soil, that field was turned out as worthless. A new clearing was made and the same ruinous system continued. In Virginia and other Eastern and Southern States, this course has been followed till the land would scarcely yield a tenth of the produce it did when it first came under cultivation, and not enough to support their population, and consequently the farmers became impoverished, and sold their lands for a trifle, and came West and commenced the same work of destruction. If this practice is continued, it will be but a few years, before the rich, virgin soil of the West, will be brought to the same exhausted condition, and the occupants must again sell out and go farther West in search of more land, which, in its turn, will be reduced by the same exhausting system. It is a mistaken idea to suppose that even our richest land will not become entirely worn out, if crop after crop is taken from it, unless something in the form of manure is returned to it.

There are thousands of acres of land in Virginia, which, by this system of cropping, were so far exhausted that fifteen bushels of corn could scarcely be raised from an acre. These lands

have since fallen into the hands of a class of enterprising and industrious farmers from New York, who, in the exercise of intelligence, judgment and skill, in the application of guano and other expensive and concentrated manures, and in adopting and carrying out a judicious system of rotation of crops, embracing, at short periods, clover, the best of all natural fertilizers, have succeeded in restoring many of these lands almost to the state of fertility which nature gave them.

From the advantages of the location of some of these farms, notwithstanding the great cost at which they have been reclaimed, we doubt not they have yielded a more profitable return than their former owners have derived from the cultivation of their new Western lands.

Farms which are devoted to raising stock that consume the crops grown upon them, are less rapidly exhausted than those from which the crops of grain and hay are sold. Upon farms where the grain, hay, straw and offal are fed to stock, the farmer may realize a double profit: First, by the profit arising from the sale of his stock; and second, from the larger quantity of *manure* he makes and applies to the improvement of his fields, and thereby increasing the quantity of grain, and thus he is enabled to add to the number of his stock.

Upon those farms from which the hay, grain, and other products are chiefly sold, too little care is bestowed in gathering and economising the various substances which are to be found capable of being converted into manure. This important branch is sadly neglected on too many of our Western farms.

It is well known that an acre of land of a certain character will yield *seventy-five* bushels of corn, while another acre, subject to the same degree of sunshine, the same rains, the same dews, and receiving the same treatment and the same amount of labor, will produce but *thirty* bushels of the same grain. To what cause shall we attribute this difference in the result? If you analyze the soil critically, one will be found to abound in the elements which go to make up a large yield, and the other will show a lack of some one or more of the constituents required for an abundant crop.

Every load of corn, wheat, hay, or other product removed from the farm, takes from the soil so much of the constituents of these crops, and unless their equivalent is returned to the land in the form of manure, the amount of each succeeding crop will be diminished, until the land will no longer yield a remunerating return for the labor of cultivation.

Before the practice of improving and fertilizing the land we cultivate will become universal, the science of agriculture must be taught in our common schools, and the operation of these natural laws explained, by which poor soils may be transformed into fertile ones, and rich soil rendered into sterile fields.

The growth of plants is governed by laws as unchangeable and enduring as those which cause day and night, summer and winter, rain and snow. It is gratifying to know that the light of science is beginning to reveal to us the hidden laws of nature, and that some of our young farmers are beginning to study and practice a proper system of tillage, the formation of crops, and the improvement of the soil as a science.

In a future number we shall say something upon the subject of a rotation of crops, of manures, the various natural sources of supply, their manufacture, application, &c.

OHIO AGRICULTURAL COLLEGE.

Last year, an association was formed under an Act of the Legislature of Ohio, for the purpose of permanently establishing an Agricultural College. A course of lectures was delivered last winter to a large class, and the enterprise now promises the greatest success.

The college is located at Cleveland, and the second lecture session commences on the first of December, and will continue twelve weeks.

The plan is that which is generally pursued in medical colleges. Four lectures will be given daily during the term. The subjects in the course will be embraced under four heads: 1st. Geology, Mineralogy and Chemistry. 2d. Botany, Vegetable Physiology, Field Crops, Orchard and Gardening. 3d. Comparative Anatomy and Physiology, Natural History and Domestic Animals, Veterinary Medicine, Insects, &c. 4th. Rural Architecture and Landscape Gardening, Use and Construction of Implements, Surveying, Farm Book-keeping, &c.

The lecturers, who are gentlemen of the first talent in the country, are Prof. J. P. Kirtland, Prof. J. Dasecomb, Prof. Sam'l St. John, Prof. J. H. Fairchild and Prof. N. S. Townsend.—Harvey Rice, President; Thomas Brown, Secretary. Terms for the entire course \$40.

We are gratified to see this movement in Ohio, and hope soon to see similar institutions multiplied, and at no distant day to see them in Kentucky and Missouri. With this view, we understand that petitions are now in circulation to present to the Kentucky Legislature during its present session.

Improvements in the Corn Planter.



MR. COLMAN:—An accurate description of Randall & Jones' Corn Planter was given in the Valley Farmer for February, 1855. The improvements which have been made in it since that time may be described in connection with the above cut. They are the following:

A Thumb Piece—a small projection of iron at the end of the lever, around which the thumb passes. This being grasped by the thumb, enables the laborer to depress the handle of the lever without chafing the backs of his fingers, or using gloves.

An improved pivot for the lever to turn upon. The small wooden tumbler inside of the joint, which before came only half through the lever, is now made longer and comes quite through, projecting slightly, and a broad washer is placed over the end of it, so that it may be screwed down firmly to the brace without binding the lever in the least, and thus furnishing an admirable bearing.

The upper end of the tongue is made narrower, and a small clasp of iron is screwed over it, which keeps the tongue in place, preventing it from moving to the right or left. This prevents the friction between the side of the tongue and the sheet iron at the top of the reservoir, which required, last year, the use of oil or tallow.

A new division piece, in the reservoir, in front of the tongue, and between it and the corn.—Last year this was made too short, so that a large surface of the tongue was in contact with the corn. It now extends quite to the bottom of the reservoir, having only a small hole in the middle at the lower end, just large enough to admit the corn to the seed cup. This effectually keeps the corn from friction against the tongue

or from getting in at the side of it, and binding it, as happened in some cases last season.

Had the tongue been made last year to fit nicely, instead of being made too narrow, these improvements might not have been suggested,—their necessity would not have been felt; as it was, the ingenuity and perseverance of the farmers enabled them, generally, to remedy the defect, so that in most cases they are well satisfied with the Planter without these additions.—But the improvements are valuable, and I will cheerfully add them to every Planter sold last year, or give a new one in exchange, without extra charge, as I wish those farmers whose enterprise and perseverance and liberality led them to try the Planter last season, and, in many cases, trust their whole crop to it, and to keep it, notwithstanding its defects—I wish that *they* may go into the field next spring with as good a Planter as I can furnish. E. LEIGH.

LETTER FROM UNION CO., ILL.

We have received a letter from MOSES A. GOODMAN, Esq., of Jonesboro, Union Co., Ill., containing, not only a club of subscribers, from that place, but also some information, which will prove interesting to our readers. Mr. GOODMAN says:

I must here inform you, that we have at last organized an Agricultural Society in Union Co., which is in some measure owing to the *Valley Farmer* being read by our people. We met in Jonesboro, organized, and got about two hundred members in less than two weeks, and have assurance of great success. As I supposed you desired to know what was going on in "Egypt," I thought this item of news would prove interesting to you.

By all means continue to recommend RANDALL & JONES' Corn Planter. It is an excellent utensil. I notice that there has been some improvement made in it. Mine does well as it is, but if it can be improved, I think it due to me to be informed in what that improvement consists.

It would very much oblige some of your subscribers, if you would give the best method of raising barley, through the medium of your valuable journal, as many have sent off and procured seed, and know but little about raising it.

Note by the Eds.—Our space will not enable us to insert an article on the cultivation of barley, in this No. We will endeavor to have our next number contain one. Will not some of our subscribers furnish us an article on the subject?

THE PURSUIT OF AGRICULTURE.

EDITORS OF THE VALLEY FARMER:

In accordance with your invitation extended me, of becoming an occasional contributor to the columns of your journal, I send you a few random thoughts upon the PURSUIT OF AGRICULTURE.

It is with much diffidence that I attempt to write upon a subject so large, and only ask for the suggestions offered, such consideration as may rest upon the reason which supports them.

It strikes me as somewhat remarkable, that in this advancing age, three pursuits in life,—Law, Medicine and Divinity,—should be conceded by almost universal consent, to constitute "*the learned professions*:" and yet more remarkable, that large preliminary preparation for, and extensive learning in those three professions, should be deemed essential prerequisites to entering upon their practice: whilst the great pursuit of Agriculture is neither considered learned, nor a preparatory course of study and extensive acquaintance with its principles expected of its practitioners.

I submit whether this is not an error, and one too, of most important consequences?

It is the business of the agriculturist to produce the most with the greatest economy of means. To this end, there are some things he must know, besides how to handle the plow, the hoe and the scythe—beside the knowledge of seed time and harvest, and the common processes of saving his crops. True enough, a man may carry on a farm with tolerable success on a small fund of information, at the present time, because the majority of his competitors, like himself, have not made the principles of Agriculture the subject of profound thought and study.

In order to produce the most (in value) with a given outlay, several things are evidently to be considered:

1st. What products will yield the greatest net value?

In order to ascertain this, the farmer must be perfectly versed in the geography and geology of the world. He must know the chief markets, and thoroughly understand the progressive system of Railway and Oceanic intercommunication. For, by watching the prices current of the great markets of the world, he learns, not only the average prices of each commodity in the best market, but also the demand and supply of each commodity. By a thorough knowledge of the geography and geology of the world, he knows the productive capacities of the different States and nations; and understanding the sys-

tem of Railway and Oceanic intercommunication, he knows what supplies may be brot forward into market.

The knowledge of these things, is the basis of his calculations, and from these he reasons to the probable prices which each commodity may command in succeeding years, under increasing facilities, by land and water, of reaching the markets. Every new facility for reaching market, develops production, increases supplies, and as a consequence, other circumstances remaining the same, throws the supply and demand out of their previous relations, tending to the depreciation of prices.

But while the projection of new rail roads, and increased river and ocean tonage, increase supplies, they likewise develope trade and commerce, which bring into requisition a greater number of consumers, and so there are more mouths to feed; and hence the farmer, to be enabled to approximate an accurate estimate of current prices for future years, must be conversant with the history of Commerce, not only in reference to the effects of increased facilities of intercommunication in developing production and supply, but also in developing demand by increased consumption.

But this is not all. The farmer must not overlook the fact that such reasoning will not at all times apply; for the changing relations of States, in peace and war, most powerfully influence the markets. Large conscriptions for armies draw men from agriculture, lessening the number of producers, and enlarging the number of consumers, while finances are depressed, and intercommunication is more or less deranged. It is evident, therefore, that the farmer, in order to form an enlightened judgment as to what commodities he should produce, must watch the current of events—must understand the great political movements upon the chess-board of nations, and understand their tendencies.

If I am right in these views, the enlightened farmer may appropriate to himself the learning of the geographer and political economist, of the geologist and the historian, and in solving the difficult problem, in which he is interested, must exercise some of the greatest qualities which belong to statesmen. (To be continued.)

SOUTH WESTERN AGRICULTURAL AND MECHANICAL ASSOCIATION.

Mr. D. W. RAY, one of the Editors of the New York *Horticultural Review*, was present at the Fair of the South Western Agricultural and Mechanical Association, and in a letter to that journal, thus speaks of the exhibition. We were

present, and can endorse all that Mr. RAY says of it: C.

I have just returned from a trip of observation at the South-west, where I attended the Fair of the Southwestern Agricultural and Mechanical Association. I was introduced to the President of the Society, Mr. Hancock, at whose instance I became an invited guest during the week of the fair. I was also much indebted to the Vice President, Mr. Mallory, for attention and information; also to Mr. H. P. Byram, the gentlemanly editor of the horticultural department of the *Louisville Journal*. This exhibition was attended by over 60,000 people. There is a feeling of rivalry and emulation in regard to agricultural exhibitions in Kentucky that is salutary and beneficial in its effects. There are about a dozen societies of this kind in Kentucky, who hold annual exhibitions. Their grounds are well arranged, of ample dimensions, all having circular amphitheatres capable of seating, under cover, from 15,000 to 25,000, and what adds to the interest of the enterprise, these fixtures are usually erected at a cost of from \$20,000 to \$30,000, and are permanent.

The display of agricultural implements was fine, and in great quantity. The exhibition of fruits was meagre in the extreme, owing, probably, to the lateness of the season. The only variety of fruit worthy of notice was peaches, mostly of the late clingstone kinds. The display of flowers was fine. Some bouquets did justice to their fair exhibitors.

There is no State in the Union that can boast of possessing finer horses and cattle than Kentucky. Their principal aim for years has been to improve their stock of these animals. Their importing associations often bring out \$80,000 worth of cattle from England per year. The character of the horses exhibited at Louisville excelled anything of the kind I ever saw before.

There was the utmost enthusiasm manifested during the exhibition by the ladies. Each one had her favorite horse or animal and described their good points with as much precision as if they had been connoisseurs.

The amphitheatre presented all the gorgeous hues of the rainbow, so great was the array of of beauty. It seemed as if all Kentucky's fairest daughters had turned out *en masse*.

The weather was very propitious for such an exhibition. It was bright, clear, cloudless October weather; no frosts had yet tinged the forest with red and golden hues, and to see the endless panorama of moving life in the shape of elegantly dressed ladies, it seemed as one was on enchanted ground, and called vividly to mind the scenes described in "Arabian Nights." I shall ever remember with pleasurable emotions, my visit to the Louisville Fair, and the many kind friends I found to make my stay agreeable. I was especially thankful for the kindness and hospitality of the gentlemanly President of the Louisville Railroad, Mr. Hobbs, whose place I visited, twelve miles from Louisville. Mr. Hobbs is an enthusiastic admirer of fine fruits and flowers. He lives in princely style on his farm of about 80 acres, upon which his enterprising partner, Mr. Walker, is establishing a fine fruit

nusery. His house is built in a chaste Gothic style, is ample and commodious. It is embowered in a rare ornamental desciduous and evergreen trees, comprising a variety from the graceful Deodor to the classic Cedar of Lebanon. Louisville can boast of some fine hotels, among which are the Galt House, Owen's Hotel, and last though not least, a new hotel called the National. This is a fine new building of great architectural beauty, situated corner of Fourth and Main streets. I was introduced to mine host of the National by my friend Johnson, editor of the Ky. Statesman. This hotel, in point of size, will compare with the Prescott House, of New York. Its fittings and furniture are of the most costly and gorgeous description, nearly equalling that of the Metropolitan or St. Nicholas. The room allotted me contained rosewood furniture of the most costly description, and a Turkish carpet, which returned no sound of the footfall. Its brilliant figures stood forth in such bold relief, that it seemed as though live roses had been scattered over its surface.

Altogether, my ramble has been very agreeable in various respects. I have been gratified with a view of this garden State, its people, and lastly, I have done something towards making the New York Horticultural Review a permanent institution in Kentucky.

THE EMANCIPATION OF THE FARM.

We copy the following article from the *Homesstead*, published at Hartford, Conn. It will be seen that the Editor is not altogether willing that the people of the East, should pay to the farmers of the West, millions of dollars annually, for flour. Neither does he speak very favorably of the crops of corn, grass, hay, oats, rye and potatoes, at the East. The West is the country for the farmer, after all! With good cultivation, and a proper rotation of crops, the land of the West will be productive for centuries:

It may, perhaps, be startling news to the descendants of the heroes who fought at Bunker Hill and Lexington, and the heroes of later date who repulsed the British at Stonington, and fell with Ledyard on Groton heights, that they are not yet free. There is another than civil bondage, which may as really oppress us as regal tyranny, though our pride does not so strongly revolt at it. As to the matter of fact, it seems about as bad to us to pay to the West millions annually for flour, as it was to pay the British a less sum for tea. If a tax gatherer were sent into the rural districts of our Commonwealth, to collect of the farmers twenty, thirty, or forty dollars a year from every house for the use of a foreign government, our present dependence upon other States for breadstuffs would be put before us in tangible shape. We do not feel this dependence or reflect upon it, because we happen to purchase flour at the nearest market town, and pay for it in cash without credit.

If wheat were a tropical plant that our climate would not mature, or if there were other articles that we could grow upon our farms to

better advantage, the case would be different. But statistics show that the average wheat crop of New England is quite equal in its yield per acre to some of the large wheat growing States of the West. Then we have the fact that the soil and climate in the early history of the country did produce good wheat, and that considerable quantities were exported from our sea ports to the mother country. Men are now living who tell of the fine wheat crops that were raised by their fathers when they were boys, sixty and seventy years ago. There can be no doubt that with the requisite knowledge of the wants of this crop, we can grow wheat successfully in every town in this Commonwealth, and that we can economically supply every barrel of flour consumed in our borders. The business of the farmer is to feed men, just as it is the business of the collier to produce coal to warm men. Bringing coal to Newcastle is a proverb which has its exact parallel in selling wheat to farmers.—The owner of a Pennsylvania coal mine might as well buy coal in Kentucky, and have it shipped to Pittsburg, as for Connecticut farmers to be buying Illinois and Michigan wheat, and importing it to Hartford, New Haven and other market towns, to be distributed in the rural districts. Is it said that the wheat will not grow here? We reply, that the coal would not be produced at Pittsburg if the mines were not worked. No man finds coal there dropped at his door—every fall for winter use. Even if he owns a mine, he is obliged to work it, and use his team to get it to his own dwelling. We have the wheat mines under our feet, and it is our business to work them. Wheat is so much used, that it has become a necessity, and we must have it, even if we have to pay for it in hard cash, at twelve dollars a barrel. Wheat will grow upon our soil with about as much certainty as any other crop. Even our corn sometimes partially fails. Grass is often scanty and the hay not more than half a crop. Oats frequently yield little less than straw. Rye winter kills, and potatoes are a total failure. We believe wheat is a surer crop in Connecticut now, than potatoes. Why then should wheat be wholly discarded, and we pursue the miserable policy of importing our own breadstuffs?

It is a very large tax upon our farmers for which we get no equivalent. Many of us who till the soil, pay thirty dollars annually for flour. The policy is just as bad as to pay a like sum for wood, when you had fifty acres of woodland within a mile of your dwelling. The purchase would save the cutting and hauling of the wood, but then, there would be that amount of wood which might have been removed without any detriment to the lot, and the labor of cutting and hauling would otherwise have been wasted. It simply wants labor, skill and capital to get wheat out of our soil, and these three things will bring wheat out of our fields cheaper than it can be brought from any other quarter.

If it were the policy of our farmers to concentrate their efforts upon a single branch of husbandry, and to make stock, grain, the dairy, beef or pork, the main item of production on any one farm, the question might be decided differently. But this is not the policy of our farmers,

and we hope, for the good of the Commonwealth, that our farms may never be monopolized by any one production. The aim of the farmer is to produce everything that his family needs upon his own soil that it is adapted to produce, and to produce a surplus of any commodity that is marketable to exchange for necessities and cash in the nearest market town. This course may not be as well for the few who are enterprising, and have the capacity to manage a large capital and to make a fortune; but for the many who love rural life, and are content with its enjoyments, we have no doubt that the present varied husbandry is altogether the best. The man who produces nearly everything he wants upon his own premises, who is fed with his own vegetables, fruit, meats and bread, who drinks his pure water, and feels no need of Newark cider and dye-stuff labelled Champagne and Old Port—who is clad in his own flax and broadcloth, and warmed by the fuel of his own forests—is certainly more independent than the man who raises nothing but butter and cheese and gets every thing else by exchange. The cost of producing these things at home cannot vary much with the change of times; but he who depends upon the markets has to run the risk of fluctuation in the prices of all the articles that he purchases, and of the main article of production upon which he has to rely for his livelihood.

GENERAL RULES FOR BUILDING.

The following, which are a few of the rules to be observed in building houses, may afford some useful suggestions to those about to engage in such undertakings.

1. Always compare the *cost* with the *means*, before deciding on the plan. It is much better to build within means, than to have a large, fine house, hard to keep in order, and encumbering the owner with a heavy and annoying debt. A great error with many is an attempt to build *finely*. Attend to real wants and substantial conveniences, and avoid imaginary and manufactured desires.

2. Study a convenient location rather than a showy one: a house on a lofty hill may make a fine appearance, but the annoyance of ascending it will become greater each successive day.

3. Build of such good materials as are near at hand. An interesting index is thus afforded to the resources and materials of that particular region, with the addition of great economy over the use of such as are "far brought and dear bought."

4. Prefer lasting to perishable materials, even if more costly. A small, well built erection, is better than a large decaying shell.

5. Discard all gingerbread work, and adopt a plain, neat, and tasteful appearance in every part. Far more true taste is evinced by proper forms and just proportions than by any amount of tinsel and peacock decorations. A marble statue bedizened with feathers and ribbons, would not be a very pleasing object.

6. Where convenient and practicable, let the plan be so devised that additions can be subsequently made, without distorting the whole.

7. In all *country* houses, from the cottage to

the palace, let the kitchen (a most important apartment), always be on a level with the main floor. It requires more force to raise a hundred pounds ten feet upwards, whether it be the human frame or an assortment of estates, than the same weight one hundred feet on a level.—To do it fifty times a day is a serious task. If the mistress superintends her own kitchen, it should be of easy access.

8. Every entrance from without should open into some entry, lobby or hall, to prevent the direct ingress of cold air into rooms, and to secure sufficient privacy.

9. The first floor of any house, however small, should be at least one foot above ground, to guard against dampness.

10. Flat roofs should be adopted only with *metallic* covering. Shingles need a steeper inclination to prevent the accumulation of snow, leakage and decay—more so than is frequently adopted. A steep roof, is additionally, cheaper, by admitting the use of less perfect material for an equally perfect roof, and giving more garret room.

11. More attention should be given to the convenient arrangement and disposition of rooms in constant daily use, than those employed but a few times in the course of a year. Hence, the kitchen and living-room should receive special attention.

12. Every cellar should have, besides the stairs within, an outside entrance, for the passage of barrels and other heavy articles.

13. The coolest rooms in summer and the warmest in winter, are those remote from the direction of the prevailing winds and from the afternoon sun. Hence parlors, nurseries, and other apartments where personal comfort is important, should be placed on this side of the house, where practicable.

14. The pantry, and more especially the china closet, should be between the kitchen and the dining room, for easy access from both; and the bath room between the kitchen and nursery, for convenience to warm water. The kitchen should have opposite windows, for full light, and for securing a current of air in summer.

15. Brick and stone houses should always be lathed and plastered inside, so as to leave a confined portion of air in the wall, to prevent dampness.

16. *Unburnt* brick should not be used for "filling-in" wooden houses, as rats are often known to cut through them.

17. To prevent rats from burrowing into cellars, either make a good water-line floor, or else build the wall on a close jointed flagging, laid some inches below the bottom of the cellar, and projecting three or four inches beyond the wall. The rat burrows down next to the wall, reaches the flagging, and cannot pass through it, never in any case working back.

18. In erecting brick walls, place strips of lath *between* the courses, and not thick blocks *in* the courses, for nailing to. The former will bind the walls together, and only become firmer by the entrance of the wedge-form nails; the latter are very liable to become loosened.

19. The two corner furring pieces of rooms should be very securely nailed together, to pre-

vent the plastering from cracking at the corners.

20. Always reserve ten per cent. of cost for improvement and planting. Remember that a hundred dollars in trees and shrubbery produce a greater ornamental and pleasing effect than a thousand in architecture.

21. Lastly, *never build in a hurry*; mature plans thoroughly; procure the best materials, and have joiner work done at the cheaper season of the winter, and the erection will be completed in the most perfect manner, and with the greatest practicable degree of economy.—*Rural Register*.

GUANO—ITS HISTORY.

Guano, as most people understand, is imported from the Pacific—mostly of the Chincha group, off the coast of Peru, and under the dominion of that government.

Its sale is made a monopoly, and the avails to a great extent, go to pay the British holders of Peruvian Government bonds, giving them to all intents and purposes, a lien upon the profits of a treasure intrinsically more valuable than the gold mines of California. There are deposits of this unsurpassed fertilizer, in some places to the depth of sixty or seventy feet, and over large extents of surface. The guano fields are generally conceded to be the excrements of aquatic fowls, which live and nestle in great numbers around the Islands. They seemed designed by nature to rescue, at least in part, that untold amount of fertilizing material which every brooklet and river is rolling into the sea. The wash of alluvial soils, the floating refuse of the field and forest, and above all, the wasted materials of great cities, are constantly being carried by the tidal currents out to sea. These, to a certain extent at least, go to nourish, directly or indirectly, submarine, vegetable and animal life, which in turn goes to feed the birds, whose excrements at our day are brought away by the ship-load from the Chincha Islands.

The bird is a beautifully arranged chemical laboratory, fitted up to perform a single operation, viz: to take the fish as food, burn out the carbon by means of its respiratory functions, and deposit the remainder in the shape of an incomparable fertilizer. But how many ages have these depositions of seventy feet in thickness been accumulating.

There are at the present day countless numbers of the birds resting upon the Islands at night; but according to Baron Humboldt, the excrements of the birds for the space of three centuries would not form a stratum of over one third of an inch in thickness. By an easy mathematical calculation, it will be seen that at this rate of deposition, it would take seven thousand five hundred and sixty centuries, or seven hundred and fifty-six thousand years, to form the deepest guano bed. Such a calculation carries us back well on to a former geological period, and proves one, and perhaps both, of two things—first, that in past ages an infinitely greater number of these birds hovered over the islands, and secondly, that the material world existed at a period long anterior to its fitness as the abode of man. The length of man's existence is infinitesimal compared with

such a cycle of years; and the facts recorded on every leaf of the material universe, ought, if it does not, to teach us humility. That a little bird, whose individual existence is as nothing, should in its united action, produce the means of bringing back to an active fertility, whole provinces of waste and barren lands, is one of a thousand facts to show how comparatively insignificant agencies in the economy of nature, produce momentous results.—*London Farmer's Magazine*.

THE GREAT CAMEL ENTERPRISE—THE ADAPTATION OF THE ANIMAL TO THE NEW WORLD.

The following facts and observations in relation to camels came out in the course of a discussion in the Farmers' Club in New York a few days since:

Mr. Disturnell referred to the value of camels in the south-western portions of this country as beasts of burden for travelers, and especially for the army. The climate and soil is equally well adapted to their use, with the southern regions of Europe, Western Asia and Northern Africa. In March, 1855, the Government appropriated \$30,000, to be expended under the direction of the War Department, in introducing camels and dromedaries for the use of the army in the west and southwest. A vessel was fitted out and placed under the charge of Maj. Wayne, who is now in the Mediterranean with a corps of officers, examining the different species, and making purchases. The Bey of Tunis received Major Wayne with much kindness, and showed a lively interest in the subject of agriculture generally. He presented the exhibition with two superb camels, which, with the third one purchased, had, at last advices, been on shipboard sixty-five days and were in excellent health and flesh.

The vessel visited Smyrna and other parts, and at last reports was in Constantinople. The Turkish Sultan had offered a cargo of the best camels in that country sent over in furtherance of the enterprise. Around Constantinople, in the Crimea, and throughout the country generally, the Bactrian, or two humped camels are most used.

Mr. Disturnell stated that a Camel Company was chartered by the Legislature of New York in 1854, and three Commissioners were appointed who were now pursuing their investigations.

He then introduced a map, and showed that many parts of this country exactly corresponded with a portion of Europe, Africa and Asia.—Thus: Egypt had its counterpart in Louisiana and Texas; Turkey corresponded with Florida; the Crimea with Lake Champlain, New York; Constantinople with New York city; Cairo with St. Augustine, Florida, &c. Chicago is a great central point between Hudson's Bay on the north, the Atlantic Ocean on the east, the Gulf of Mexico on the south and the Rocky Mountains on the west. The camel, horse and wild ass are indigenous in Arabia. The climate, soil and food have much to do with hardihood—the horse in Arabia being much more hardy than elsewhere. The Arabian camel has but one hump, the dromedary one, while the Bactrian camel has two humps.

The Arabian camel, without green or moist food, cannot endure deprivation of water more than four days. The natural abode of the camel is in dry, sandy regions. Mr. Bartlett, of the Mexican Survey, is quite confident the camel is peculiarly adapted and quite essential to travel in New Mexico, Western Texas, etc.

Mr. Edward Magauran was next introduced, and went into a full and lengthy discussion of the peculiarities, etc., of the camel. Himsell and Mr. King, two of the Commissioners of the American Camel Company, have been for some time making extensive investigations on this subject, which they are still continuing. Mr. M. states that the camel feeds upon the cactus and drinks brackish water, two qualities eminently fitting this animal for crossing the plains to the Rocky Mountains. This camel's habits are not limited by climate, but by the character of the surface. By shoeing it will travel and do well in any locality. Some of the most healthy and best camels are found in the cold regions of Asiatic Russia.

They are adapted to draft—pair will draw 3,6000 pounds with ease. The dromedary will "amble" 80 miles, or gallop 200 miles in 24 hours. Camel's milk and flesh are superior articles of food. Their tallow is nearly equal to spermacetti or wax, in hardness. They are raised at a low cost, need no shelter or shoeing, and their equipage is very cheap. They are long lived; are little subject to diseases; have great powers of endurance; are sure footed; are not easily scared; will not get up high stampedes; and if stolen by inexperienced Indians cannot be driven rapidly away. They make capital sentry posts, their riders are raised up so high as to have a wide range of vision. The high table lands of New Mexico and Texas are just like their native countries.

It has already been proved that when imported here they live out their natural term of life. The horse, dog and sheep are not indigenous here, but have become so acclimated that they even surpass those running in their natural abodes. The camel promises even more than these animals. The Bactrian camels are fully domesticated, and thrive well in colder climates in Russia than that prevailing in the Northwest-ern Territory of the United States.

Mr. Magauran gave a long list of writers who had described the camel in various countries, in Canary Isles, in Morocco, in Algeria, &c., with extracts from their contributions, all of which showed that the company had put their work into the hands of thorough men as their commissioners.

The only articles upon the camel of any account, that have appeared in this country, are, one in the Patent Office Report, of 1853, and one by Mr. Magauran, in "Hunt's Merchants' Magazine," for June, 1854. Mr. Marsh, former Minister to Constantinople, has been very much interested in this subject, and has done much to stimulate the government to the efforts now making. Mr. Marsh is at Burlington, Vt., and will be glad to co-operate in any enterprise looking towards the introduction and domestication of the camel.

From the Homestead.

FARMER'S SONS.

When the farmer's son arrives at a certain age, he is much too apt to forsake the calling of his fathers and seek for wealth behind the counter of the merchant. He sees that if he works as his father has done, he will not be rich, and with praiseworthy intentions he seeks some other employment in which he can wield a greater influence and make his name more widely known. In the folly of youth he looks only upon the dark side of the picture, and lets health, happiness and domestic comfort be weighed down in the balance by gold—that magic talisman of the world. If his brightest prospects are realized, he retires from business, and settles with his wife and children in the country. Upon his children are marks of sickness, and he often wonders why his children should be so sickly, while his country neighbor's are strong and active. Easily might he find the answer in his own bad health and nervous and excitable temperament. Often does it happen that the rich merchant ends his days miserably, in spite of his wealth, vainly regretting that he spent health and happiness for the accumulation of a few thousand dollars.

Young farmers! stand to your plows, and if dangers threaten and difficulties come thick upon you, your own broad shoulders will bear them, your stout teams will pull you through. Are you ambitious? what a wide field is open for your talents and energy. You may not lay by as much money as the merchant; but if health, happiness and domestic comfort are wealth, you will have a boundless store, a priceless treasure. What can you perform that will please your Mader more than to render this earth more beautiful and fruitful? Where on earth would you rather spend your life than in the country, surrounded by God's best gifts, and holding sweet converse with Him through the flowers, the singing birds and babbling brooks? Young men! your country calls loudly for your talents and enterprise; if you heed her call, and put forth all your energies, you can make her the greatest agricultural nation in the world.

In reading your valuable paper, Messrs. Editors, I find that among the many things to which you have to direct your attention, you have forgotten the rising generation. As we must eventually take the places which you now hold, will it be asking too much to bestow some of the articles upon the sons, which now, in your paper, are directed only to the fathers. The greater part of the young men of our country are farmers' sons; by giving able articles in your paper, calling their attention to the work that lies before them. I think that many will be saved for the plow instead of the yard stick. Look at the immense resources of this country which are only to be developed by farmers, and you will then see that too much attention cannot be bestowed upon the objects of this article. From the great influence which you must wield through your paper, and the talent employed in it, I look for relief. Upon you rests this mighty obligation, which, as christian men and as patriots, you ought to fulfill. The fathers of these young men were the heroes of the revolution, their an-

cestry will of itself render your duty noble, and worthy of the highest talents.

Yes, gentlemen, when the great work that is going on shall be completed, exalted will be the condition of the

Plow-Box.

PRESERVATION OF EGGS FOR WINTER USE.

It should be borne in mind, that eggs are mainly composed of albumen, mixed with a minute quantity of the salts of sulphur, phosphorus, lime and magnesia. The shell consists mostly of lime. Of the whole weight, the shell constitutes about one-tenth, the white six-tenths, and the yolk three-tenths. Few animal substances are as putrescent as eggs, unless preserved with care. The shell, composed as it is mostly of lime, glued together with a trifle of animal matter, is its most natural and safe depository.—Yet even the shell yields gradually to the action of the atmosphere, so that a part of the watery fluid of the egg escapes, and air occupies its place, thus injuring the quality of it.

The great secret then of preserving eggs, is to keep the interior in an unaltered state. This is best done by lime water, in which a little common salt is infused. This constitutes a fluid perfectly indistructible by air, and one that is so allied to the nature of the shell as not to be absorbed by it, or through it into the interior of the egg. On the other hand, salt or lime, in a dry state, will act on the moisture of the eggs, as will strong ashes. This plan also, will save more eggs in a given space, than any other. It will also admit of keeping them in cellars ever so damp, and, I had almost said, ever so foul, since nothing will be likely to act on the lime-water. As eggs are very nearly of the specific gravity of water, and so near with it, I have little doubt that eggs barrelled up tightly in lime-water, could be transported as safely as pork.

Lime water may be made in the most careless manner. Seven hundred pounds of water will dissolve about one pound of lime. A pint of lime, therefore, thrown into a barrel of water, is enough, while ten times as much can do no hurt, and will not alter the strength of it. The salt, which I do not deem very important, should be put in a small quantity, say a quart to a barrel. All are aware that a very large quantity of salt may be dissolved in water. Brine, strong enough for pork would undoubtedly hurt eggs.

Having made your lime-water, in barrels if you are a merchant, and in stone pots if you are a small householder, drop your eggs on the top of the water, when they will settle down safely. It is probably important that no bad eggs go in, as it is supposed by some that they would injure others. To test your eggs put them in clean water, rejecting all that rise. A better remedy is to look at them through a tube—any roll of paper by daylight, or hold them between your eye and a good candle by night. If the eggs are fresh, they will, in either case, look transparent. If they are a little injured, they will look darkish. If much injured, they will look entirely dark.

Eggs, well put up and kept in this manner, will keep, I cannot tell how long, but until they

are much more plenty and cheap than at present, quite long enough.

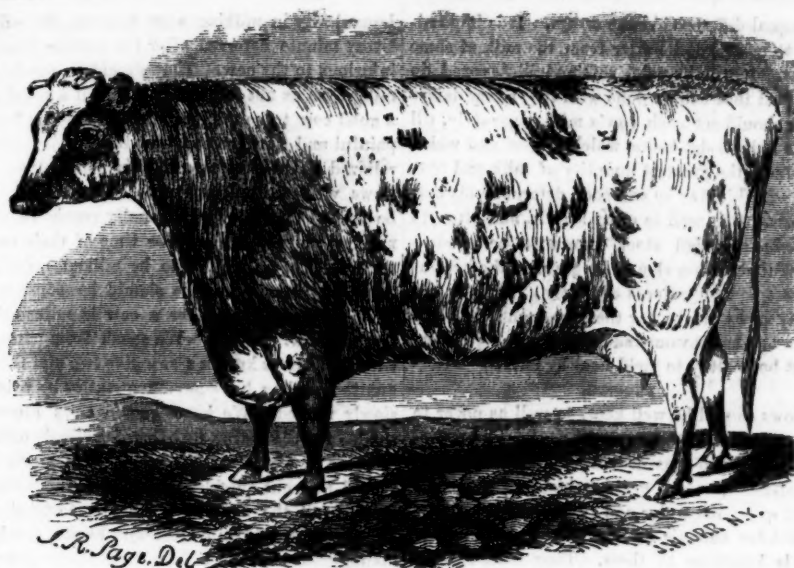
Leached ashes, well dried, and even grain, have kept eggs very well, in my experience, but no method is so cheap and obvious as the lime-water. As lime absorbs carbonic acid slowly, and thus becomes insoluble, so almost any lime, even though it has been slacked for months, will answer the purpose. Lime-water, permitted to stand still, will immediately become covered with a transparent film. This is the lime of the water uniting with the carbonic acid of the atmosphere, and returning to the state of limestone, and does not hurt the egg.—*Albany Cultivator*,

INDIAN CORN.

The value of this cereal to the country has never been appreciated. Recent investigations and comparisons show conclusively that it is of more value than any other agricultural production, not excepting cotton even, about which so much has been said. The culture of corn has wonderfully increased within the last few years; its ratio of increase being far greater than any other product. From 1839 to 1849, as per census returns, the increase was fifty-eight per cent. Wool is the next highest, its increase being fifty per cent: cotton twenty-four; oats twenty; and wheat sixteen. This is a remarkable result.

The cotton crop has not increased half so rapidly as the corn crop, and the claim of the title of "king" is only in its influence upon the commercial interests of the country. The cotton crop of 1851 was nine hundred and twenty-seven millions of pounds, valued at one hundred and twelve millions of dollars, while the corn crop of 1850 was five hundred and ninety-two millions of bushels, which at the lowest possible price at which it can be estimated, is of far greater value than the cotton crop.

The Southern States are not suited to the profitable growth of corn—the average product per acre south of the latitude of North Carolina, with one exception, being but sixteen bushels; while in Ohio it is above thirty bushels to the acre, and in New England it reaches nearly to that figure. The five States—Ohio, Indiana, Illinois, Kentucky, and Tennessee—produce one-half of all the corn raised in the United States. Tennessee and North Carolina are in the same latitude, but the soil of the latter State is not suited to the production of this cereal, while the former yields it abundantly. The profit accruing on corn to the farmer of Ohio, and on cotton to the planter of Georgia, is in favor of the former. The cost of raising corn is set down at ten cents a bushel, which, if sold at twenty-five cents, would leave fifteen cents profit. Cotton cannot be raised at less than six cents a pound, and is worth eleven and twelve cents, sometimes less, at tide water. The corn crop is more sure than all others. It needs but a few months to ripen it, and if the early frosts of spring destroy the first planting, it may be replanted with a hardier kind, which will ripen sufficiently early to escape the frosts of autumn. The export of corn is increasing. Great Britain has received nearly all which has been exported hitherto. *Ex.*



DIANA.

Owned by Brutus J. Clay, Paris, Bourbon County, Kentucky.

Red Roan: calved March, 1850; got by Duke of Bourbon, 446, out of Dido, by Romulus, (12019); Snow Drop, by Exception, (3746); Flora, by Duroc, (3666); Tulip, by Mirandi, (4488), Lady Mundy, by San Martin, (2599); imp. Mrs. Motte. (See Am. H. B. p. 350.)

THE DAIRY.

We propose in this and some succeeding articles to speak of the general management of the Dairy. We cannot be very minute or critical in the space we ought to be limited to, nor do we deem it especially necessary. What the farmers now want are practical hints upon which they may improve. In our observations in the West we feel that no subject connected with the farming interest is more important than the management of the dairy. Often several cows are kept to do the service of one, and then the milk, butter and cheese are inferior articles. Many large farmers do not produce their own butter and cheese. The valley of the Mississippi does not supply its own market with these articles. There are tons and tons of butter and cheese shipped from Ohio and New York to this market every year. It is a great drawback on the prosperity of the West to have its money thus taken from it. It is a heavy tax on the farmers. They ought to supply their own market and reap the benefit. And as butter and cheese are articles on which a heavy profit is afforded, the western farmers should see to it that they pocket that profit. We hold that every farm should have a dairy which should be skillfully managed. The health

and happiness of its occupants demand it, as well as the owner. It is not only a matter of profit, but of comfort, convenience and health. Cows are almost as essential to the well being of children as mothers. The cow is a sort of second mother to the child. The cow's udder should take the place of the mother's breast in supplying food for the child as soon as it is weaned. From the cow it should never be weaned. Milk is one of the best articles of food for adults as well as children. We have never heard of a regular milk eater being troubled with the dyspepsia, gout, neuralgia, nor any of the leading ills that human flesh is heir to. We believe that milk should be eaten every day as an article of food. But we must not dwell here. We would speak of the management of cows.

GOOD BREEDS.

Too much pains cannot be taken to secure good breeds, that is, breeds that are good both for the quality and quantity of milk. There is as much difference in the quality of milk as in anything else. Take the milk of two cows and set them separately and this difference can soon be determined. The milk of some cows will yield but very little cream, while that of others will yield a great quantity. And then there is

an equal difference in the cream. It is impossible to make good butter from the milk of some cows. It will be pale, soft and ill-flavored do the best that can be done with it. Every dairyman should set each cow's milk separately, till he is able to determine which is best and which produces the greatest quantity of milk and butter. In this way he can soon determine his best breeds. It is well to cross breeds, and often to introduce foreign stock known to be good.—Careful attention should be given to the healthfulness and ruggedness of breeds. Healthy and hardy cows are by far the surest and the best. None but healthy ones should ever be kept; they must be healthy to yield healthy milk.

KEEPING.

Cows should be well kept, so well as never to become poor. In summer they should be pastured in good pastures which produce good quantities of tame grass, which are well supplied with good water and shade. Bad water is as bad for animals as it is for men. The hot sun is injurious to them. They need cooling shade for repose, while they want the grass of the open field. The grass of woods, shady places and swamps is of but little value to them. In winter they should be well fed on hay, straw, husks, &c., and well protected from the storms, and cold. It pays as well to take good care of cows as it does of horses or any other animals. A good dairy cannot be had without good care both in summer and winter.

ABUSE.

Cows are often abused greatly to their injury. To starve, neglect, or in any way abuse them affects their milk both in quality and quantity. To expose them to cold storms, to bleak winds, to wet and weather without beds or shelter, is not only cruel but it is unprofitable. It is injurious to them, to their calves and their milk. Nor should they be abused in any way, dogged, whipped, run or frightened. They should be gently treated. There is nothing repays better for kind treatment than the cow. They should be thoroughly domesticated, made tame, manageable and docile. Their milk, butter, stock and flesh are better for kind treatment. One cow well treated is worth three mistreated; one cow treated as she should be is worth three the way they are generally treated in the West.

MILKING.

Cows should be regularly milked twice a day, and in the most fruitful season it is better to milk them three times a day. Good cows suffer in the long days of summer from distended udders. But whether milked twice or three times a day, regularity should be observed in the time.

Irregularity in milking soon dries up the milk. Every minute deferred after the regular time is injurious to the cow. They should be carefully milked, so as not to hurt them. It is a relief to a good cow to be milked. A full udder is both painful and burdensome, and the cow is gladly relieved of its contents, if it is gently done.—Cows well treated, are generally so glad to be milked that they will usually repair to the milking place at the proper time of their own accord. They should also be milked quickly. As little time as possible should be consumed in milking. The quicker a cow is milked the more milk will be got. We speak from experience. We have known a cow give two and three quarts less than her common quantity by being slowly milked. We have known cows almost spoiled for the season by being drawlingly milked for a few weeks. When the milk starts it should flow out quickly, the quicker the better, so that all the milk veins may be emptied.—The milker should milk with both hands, gently, taking great care not to hurt the teats or udder, but as rapidly as possible. The same cow should be milked by the same person; a change of hands is always bad and unpleasant to the cow and is sure to cut short the quantity of milk. So any cruelty, severity, fright, or anything that disturbs the cow decreases the milk. Any interruption in the milking process is injurious and diminishes the quantity. A good dairy may be rendered profitless by bad milkers, by irregularity, by cruelty or ill treatment. Have good breeds of cows, treat them well, feed them, house them, water them and keep them secure from abuse, and milk them regularly and properly, and you may be almost sure of an ample return for your labor in the dairy business. *

CARE OF STOCK.

"A merciful man is merciful to his beast," is a declaration from high authority; and we presume that all such have seen well to their stock, thus far, through this inclement winter—that they have provided them shelter, and furnished food and water sufficient to supply all the demands of nature. Interest, if no higher considerations, should prompt this. But we have seen, in former times, more suffering and loss of farm stock, through unpardonable neglect, in the milder regions of the Southwest than we have ever witnessed in the colder climate of the North. February and March are trying months for stock, and they should receive special care during this period. The first winter with young animals is a critical season and they require more care than through any subsequent winter.

All good breeders understand this, and provide accordingly. When exposed to the chilling blasts of winter and suffered to go half-fed, they are so checked in their growth that they seldom ever recover from it. It is of the utmost importance to the health of young animals, as to the interest of the farmer that they be kept in a constantly thriving state. When carried through the winter in this manner they will not unfrequently gain double the weight the ensuing summer—that animals will that are not well fed and sheltered as they should be.

ON THE IMPROVEMENT OF FARM HORSES.

The following is one of the best and most judicious articles we ever read, on the subject of breeding horses. We commend it to the careful consideration of all who are interested in this noble animal:

In following out the line of argument begun in my last letter, I shall strengthen my position by a passing reference to other domestic animals. We find in practice that every breed of cattle is improved by a cross with the short-horns, the most perfect of them all; and I believe there are few varieties of which the breeders do not at the present day more or less resort to this cross. In like manner, with regard to sheep, what breed is there which either is not or has not been crossed with the Leicester or the South-down? Indeed, this is one reason for the high prices which rams of these two aristocratic breeds continue to command. In all those cases it will be found that it is the superior race which assimilates the inferior to itself, and tends as it were to swallow them up. Many varieties of cattle and sheep once well known in this country are now either forgotten or are remembered only by name; and yet here the process is retarded by a cause which, so far from applying to the case of the horse, there operates in the contrary direction. There can be no doubt, as regards sheep for instance, that, compared with the Merinos and the black-faced Scotch, the Leicesters and the improved Southdowns are but breeds of yesterday. And accordingly there is a very strong impression that, however well the first cross between a Scotch ewe and a Leicester ram may succeed, to cross the produce again with the Leicester would not answer. How this may be, my experience is not sufficiently extensive to enable me to decide. If the idea is well founded, it is, at any rate, in accordance with the theory of M. Malingie Nouel, who conceives the influence of either race to be in proportion to its antiquity and purity.

With regard to short horns, as far as the opportunity which surrounds their origin permits us to judge, I am inclined to think they have existed as a breed for a considerably longer time than our improved breeds of sheep. Further back than about one hundred years, authentic details of the ancestors of the short horns are few and scanty. But according to the Rev. H. Berry, a race of cattle existed at that time, on the borders of the Tees, similar in all essential

points to those of which the pedigrees have since been recorded in the "Herd Book." As some of the earliest animals of which we possess authentic record have probably been among the best short-horns that ever existed, it is by no means likely that they should suddenly have sprung to the perfection which, in judicious hands they have ever since maintained—in a few years, or even generations. This uniformity of excellence is scarcely applicable on any other supposition than that of very considerable antiquity belonging to the breed. We know, too, that when an ordinary cow is put to a thorough bred bull, the offspring usually resembles the sire more than the dam. We also find that on the cross being pursued for successive generations, the offspring, so far from showing tokens of degeneracy, is in time scarcely, if at all, to be distinguished from those of the purest blood. But although these facts indicate a more than respectable degree of antiquity for the short-horns, they, in common with all other domestic races, must by a long interval yield the palm of antiquity to the thorough-bred horse. Compared to him, they are indeed of yesterday.—The oldest of them are but moderns in the presence of his Arab sires, contemporaries of the Prophets and the Patriarchs! No one who reads Job's description of the war-horse can mistake the race to which it applies, or deny that it is as suitable to the thorough-bred charger, which bears our heroes to victory, as it was a living patriot of his Arab ancestor 3000 years ago.—Allusion has been made in some quarters to a supposed degeneracy in the thorough-bred horse. My firm belief is the reverse. Our modern horse is a great improvement on the small, low-shouldered, though stout Arabs from which he is descended. I am confident that never were there better thorough-bred horses in existence than those which have adorned the turf for the last twenty years, and which still continue to compete for our great prizes. He who thinks otherwise had best be silent, since to express his opinion would only be to expose his ignorance.

To know the thorough-bred horse well and thoroughly is not only invaluable to the breeder, but indispensable to him, if he wishes his success to rise above mediocrity. This is the lesson, and a very long one it is in practice, which the farmers of the midland counties have to learn. At the outset they must dismiss the prejudices which represent him as a slight, weedy animal; unless when away from the turf, except as a cover hack or a lady's pad. It is sheer delusion to suppose that blood is necessarily opposed to power. Doubtless there are weeds among thorough-bred horses—bad samples of a noble race. But are there not abundances of feeble animals of any other breed, from the hunter down to the cart-horse? He who wishes to form a sound opinion as to the value of any breed must look at the characteristics of the best individuals before he is competent to decide upon its merits. It is a fact well worthy the attention of breeders, that a considerable proportion of the best racers have been horses of great power. I should weary your readers were I to enumerate them all; but, in order to show that the highest blood and the greatest swift-

ness are not incompatible with a degree of strength and substance which would fit its possessor for any purpose (except the dray) to which the horse is ever put, I will mention four examples in support of my argument—viz: Melbourne, Lanercost, Sir Tatton Sykes, and Van Tromp. The first is the sire of an Oaks winner, two Derby winners, and two St. Leger winners. Lanercost is the sire of a Leger winner and an Oaks winner. Van Tromp, his son, won the Campagne Stakes, the St. Leger and the Emperor's Vase. Sir Tatton Sykes won the St. Leger. Here, then, are four horses of first-rate reputation, the two first as sires of winners, and the two last as winners themselves; any one of which would, as a hunter, have been strong enough to carry fifteen stone across the country. To those who know what hunting is, such a character offers more explicit evidence as to power than any other description. Animals like these, though too valuable to be put—save in exceptional cases—to any but thorough-bred mares, would out of working mares produce the best of cart-horses. In fact, I know two horses belonging to a neighbor of mine—out of an excellent working mare, and got by Melbourne—which it would be difficult to surpass in every point in which a working horse ought to possess. One of the most powerful horses in a team that I ever had was by a son of Langar. It may be said that such instances do not often occur. In one sense they certainly do not; for, unfortunately, good working mares are not often put to thorough-bred horses. But, if they were, the produce would probably exhibit as great a uniformity of excellence as the breeder often attains. My object in the foregoing remarks has been to show the uninitiated in such matters what the thorough-bred horse in perfection really is. Let every one who has the opportunity of seeing the winner of any of our great races take advantage of it, if he wishes to look on a combination of symmetry, power and beauty, of which the animal kingdom affords no other example. It is possible, indeed, that the beginner, who looks for the first time at such a horse, may be disappointed, and think him unworthy of his fame; let him be assured that the deficiency is not with the horse, but in his own unpracticed perception. He has his lesson before him—let him study it diligently; and if he has an eye to appreciate, and a memory to retain forms, he will in future reap the benefit.

I have thus, I trust, shown that the thorough-bred horse possesses every requisite for improving the existing breed of working horses. In many points he is so palpably their superior, that to state them is proof sufficient. In speed, in courage, in endurance, they stand at the two extremes of the equine scale. The muscle of the thorough-bred horse, the development of his chest, the width and strength of his loins, and the general conformation of his frame, would be notable improvements upon the deficiencies of the cart-horse in these points. And even in respect of size (as I have already shown) of bone, weight and substance—those points where the racer is popularly held to be deficient—a judiciously selected thorough-bred horse would not cause any deterioration.

As a general practice, however, I am opposed to the crossing of races of widely different character. The common run of cart mares is not sufficiently good to render it safe to put them to a thorough-bred horse; indeed, I seldom see a working mare in the midland counties that I should like to breed from at all. The object to be aimed at is gradually to infuse a certain amount of blood, both into mares and stallions, and thus to obtain an improved race, characterized by greater quickness, activity, courage, and in shape by more compactness; or, in other words, by equal strength compressed into a smaller compass. I can recommend no better plan to the farmer than to purchase mares from Yorkshire, whenever his team needs recruiting. By so doing, and by never replacing the heavy blacks of our own neighborhood, the latter would in time pass away, as has already been the case with the long-horned cows, which in my earlier days used to abound in our dairies. The farmer would not find the noble quick-stepping bay and brown mares of Yorkshire more expensive to buy than their own long-haired slugs; and in them he would have animals worth breeding from. Their produce would remunerate him, whether it were by a horse of a similar character to their own, by a roadster, or by a thorough-bred horse.—*Mark Lane Express.*

BLOODY MURRAIN—A CURE.

Since our last issue we have conversed with Mr. C. Hays, one of our most reliable farmers, on the subject of murrain in cattle. He has had considerable experience with the disease, and formerly lost a good many of his own cattle, but lately he has succeeded in curing every case among his own cattle, and some for others. His mode of procedure is as follows:

Take of white oak bark, newly peeled from the tree, as much as you can easily encompass with the thumbs and fingers of both hand. Boil this in one gallon of water for a short time; then pour off the water and dissolve in it a lump of alum the size of a hulled walnut, and a lump of copra of the same size. With this mixture drench the sick animal, and the cure will soon be effected. In only one instance did he have need for any additional remedy, and then to facilitate the opening of the bowels, he administered a plate of lard.

We hope this remedy will be extensively and thoroughly experimented with in all parts of the country, and the results reported. Murrain is a disease which takes largely from the profits of stock raising in the west, and as there is no known cure there will be no harm in trying this.—*Prarie Farmer.*

Since the above was in type, we find an article on the same subject, in the *Country Gentleman*, which we copy for the benefit of our readers, believing "that an ounce of prevention is worth more than a pound of cure."

"In your paper of Nov. 29th, I noticed an inquiry by J. M. Jessup, of this State, in relation to the bloody murrain. Having had some experience in this disease, or rather having lost a number of cattle by it, I think I am somewhat

prepared to venture a few opinions and suggestions in regard to it. It has been supposed by some that the disease is occasioned by the animals swallowing leeches with their drink, and some have affirmed that they have, on a post-mortem examination, found them attached to the stomach or intestines of the animals. But I have examined a number of cattle of my own, that have died with this disease, and could never discover anything of that kind. I am fully convinced that it is caused by the kind of food the animal gets, as suggested by your correspondent—whether by one or more vegetable products, I am unable to say.

When this section of the country was new and cattle lived almost wholly on the wild grasses and other indigenous products, to hear of their dying of murrain was an almost daily occurrence. But as soon as the farmers began to have "tame feed," as the term was, the murrain was less frequent; and now it is a rare thing to hear of a case.

As to "remedies," I have tried them, to no purpose. The real remedy consists in prevention. Let me say to your correspondent—give your cattle good timothy, redtop, red or white clover, and plenty of salt and ashes, (two parts of the former to one of the latter) twice a week and not allow them wild food, and they will no longer be troubled with murrain. B. J. HARNEY. *Adrian, Lenawee Co., Mich.*

THE LAMPERS IN HORSES.

Burning for the Lampers is as good and humane a remedy as is suffocation between two feather beds for hydrophobia—both have been practiced by the ignorant, and both are effectual. The horse, to be sure, survives the infliction while the feather-bed patient is bound to die. But both of these barbarous remedies (?) have long been discarded by civilized and intelligent men.

We have occasionally had a case of this complaint in our stable, and have always attributed it to over-feeding, but in no single case, however bad, within our knowledge and experience, has it resisted a course of bran mash, continued for a day or two, with the addition, in one or two instances, of a purgative of salt or aloes. (The first thought of our farm hands always was to take the animal to the blacksmith's to be burned.)

Youatt says: "The bars occasionally swell and rise to a level with and even beyond the edge of the teeth. They are sore and the horse feeds badly on account of the pain he suffers from the pressure of the food on them. This is called the lampers. It may arise from inflammation of the gums, propagated to the bars when the horse is shedding his teeth—and young horses are more subject to it than others—or from slight febrile tendency in the constitution generally; as when a young horse has lately been taken up from grass, and has been overfed or not sufficiently exercised. At times, it appears in aged horses; for the progress of growth in the teeth of the horse is continued during the whole life of the animal. In a majority of cases, the swelling will soon subside without medical treatment, or a few mashes and gentle alterative

will relieve the animal. A few slight incisions across the bars with a lancet or a penknife will relieve the inflammation and cause the swelling to subside: indeed this scarification of the bars in Lampers will seldom harm, although it is far from being so necessary as is supposed. The brutal custom of the farrier, who sears and burns down the bar with red hot iron, is most objectionable. It is torturing the horse to no purpose, and rendering that part callous, on the delicate sensibility of which all the safety and pleasure of riding and driving depend. It may be prudent, in case of Lampers, to examine the grinders, and more particularly the tushes, in order to ascertain whether either of them is mashing its way through the gum. If it is so, two incisions across each other should be made on the tooth, and the horse will experience immediate relief."

In lancing the gum for a coming tooth, it is much better to nick the gum at the side rather than upon the edge above the advancing tooth. This is practiced with young children by most physicians. Any one troubled with a tender and swollen instep can comprehend the rationale of this. If he cuts his boot upon the point of pressure, he finds the foot puffing up more, but when he makes a few incisions on either side of the boot, near the sole, the pressure ceases, and his instep is at once relieved.—*Practical Farmer.*

MANAGEMENT OF A STOCK OF HOGS.

Does it pay to keep hogs upon a farm? that is the question. We don't know that it does but we think it ought to pay. It is getting to be a general impression, that to raise one's own pork, and to save one's own bacon, is an expensive luxury. We do not think it necessarily so, and will give our young friends and others who want advice a few practical hints on this subject.

A good breed of hogs you must have to start with, and thanks to the improvements of the day, you can easily get. No matter how good the breed, however, never suppose he is to live and thrive without proper and sufficient food. The more artificial the breed and the more highly improved, and the more capable of yielding a profit to good management and proper treatment, the less capable they will be of shifting for themselves. If you want a hog that will take care of himself, tear your neighbor's corn-field to pieces, and yield you no profit, get the land shark, with his nose, back and belly exactly suited to carrying out the intelligent designs of an animal which, from its earliest infancy, has been thrown upon its own resources.

Having got a good breed, have a generous confidence that he will repay your most careful attention. It is desirable to have a permanent fixture; a lot of one or two acres, according to the number you keep, and in this have good lodging pens, where in all weather they may have dry beds of leaves, and make themselves quite comfortable—these may be made of logs, as is very common on large farms, but made of posts with plank on the most economical scale, are cheaper, perhaps, in the end. Give him any amount of liberty which may suit your convenience—let him roam in the woods in winter, or

in the pasture in summer, but have your lot and your houses where you can at your pleasure bring them under proper restraint, and give them proper protection. This lot will be very useful likewise to put your pen hogs into for a week or so, in the anticipation of their closer confinement in their feeding pens, that the change may not be too sudden from their "larger liberty."

Management of a Stock of Hogs.—The usual practice in the management of hogs is to keep the whole stock for the fall killing, through the previous winter. In this practice lies, perhaps, the secret of want of success in hog-keeping. The most economical method, we are inclined to think, would be to keep sows enough to have the whole stock of pen hogs come about the first of March, to be well prepared with ruta-baga turnips, or other roots, a lot of rye or other early pasture, and clover field, to furnish both sows and pigs with full supplies of succulent food from the start, and throughout the season. Such management may bring any tolerable breed to a weight of 150 to 175 lbs, by the middle of December.

This plan would require for a pen of forty hogs, eight brood sows. These sows with the boars, would be the whole stock to be wintered. They should be so managed that they would bring their pigs by the 1st of March, and allowing for miscarriage or other accidents, might be relied on to average five to the sow. The sows being allowed to breed again, would have as many or more pigs about the 1st of September. These in a good pasture would cost very little to raise them, and might be disposed of in the fall, leaving only the stock of sows and boars after the annual killing. Of the eight sows, four might go into the fattening pen annually to be substituted by four young ones, so as to have always one-half the number, old breeders.—When this is done, it would be advisable not to allow the four which are going into the fattening pen, to breed in the summer.

Another arrangement, a compromise between this plan and the common method would be, for a pen of the size mentioned, to have four brood sows. The August and September litter of these, being kept in good condition, would go easily through the winter with proper care, and with the four sows and boar would constitute the stock to be wintered. Then taking the March litter as before, force them rapidly forward, and unless the fall litter has been particularly well kept, these will rival them in the killing pen. We think either of these suggestions, under judicious management, would take the balance of the hog account from the loss to the profit side. True economy in the management of all animals require that they be carried as rapidly as possible through the chances of life to that point of development which they afford a return, and he is the best manager who approximates this in his practice. Old habits and old prejudices will fight against it, but we will come to it by and by.

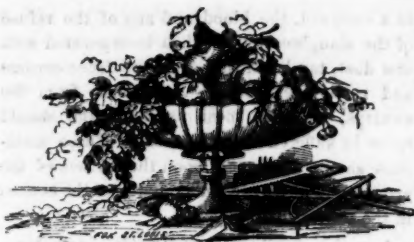
Feeding.—A corn and cob crusher the man who keeps twenty hogs must have—that is settled. A boiler we think he will have, if he is determined to make the most of his means. He should grind every ear of corn, and soak a number of hours at any rate, if he does not steam or

boil. If he only soaks he should have two tubs, to be fed from alternately, and whenever he empties one fill it again. If it ferments somewhat it will be the better. Boiling, however, would be much better, and insure the appropriation of the whole nutritive matter. This food, with ruta-baga turnips, or other roots boiled or unboiled, both occasionally, perhaps, and in such quantity and proportion as your judgment and experience may direct, will be the proper food for your sows—giving them enough only to keep them in good condition during the period of gestation, and ample supplies when nursing. A rye pasture will give early and valuable green food, (rye for this purpose should be sown 1 1-2 bushels to the acre) and the red clover succeeding, will keep up the supply. The pigs to be weaned at ten weeks old, but to be accustomed long before that, to eat from troughs in pens from which the mothers are excluded. When weaned, see that they do not lose ground, but push them on. The sows, if well fed will soon breed again in time to bring their litters by the last of August. These litters, if your sows have a good wood range, we have known run till Christmas without a grain of corn, and made very good thrifty shoats. The feeding of all intended for the fattening pen must be regularly carried on through the season. An acre or two or more, of field peas would be desirable pasture for them about September. By the beginning of October they should be brought into the enclosure mentioned in the beginning; their ground corn gradually increased; with pumpkins, &c., and by the middle of October, have them in their pens on fall allowance of corn until fat—taking advantage of the moderate fall weather for fattening, and killing on the increase of the moon, not that we believe in the moon, not at all, but that's as good a time for killing as the decrease, and why not take all the chances against *shrinking in the pot*.

The points that we would press as to feeding, is a generous supply from the beginning, but moderate or full in proportion as you may want a moderate size—say 150 lbs., or a larger, say 200, or more. We recommend a gradual change from pasturage, increasing the supply of more nutritious food until he can, without injury to his digestion, take a full supply—also gradual change from a free range, first to his lot of an acre, and then to his close feeding pen. Then we recommend the most thorough preparation of his food by grinding and boiling. These, with tight, dry pens, will settle the question whether hogs will pay the cost of their keeping.

If the reader thinks he will further test the matter, let him open such an account as the following. It will add much to the interest of his farm operations to have a number of such accounts and tend to promote accuracy and care in the general conduct of business transactions:

<i>Stock of Hogs to A. B. A.</i>		<i>Dr.</i>
The value of stock of Hogs on hand 1st Jan.,		
say 8 brood of sows, at \$10.....		\$80 00
One Boar.....		15 00
To corn furnished them for 3 months, }	say.....	36 00
To Ruta bagas " " " " }		
To Corn, pasturage, &c., from 1st April to 1st		
of October, say.....		64 00
To feed and attendance on pen hogs.....		120 00
		[American Farmer.]



Horticultural Department.

THE GRAPE—THE VINEYARD.

Several little treatises on the culture of the Vine have already been published in the United States, which would prove a safe guide in the hands of any intelligent cultivator; but as these are not altogether within the reach of many of our readers, we have been requested to publish in the *Valley Farmer* a series of articles embracing the whole subject of the cultivation of the vine, the manufacture of wine, &c., which we propose to do. We may not, however, furnish them in regular consecutive numbers, but we will in the February and March numbers give such directions as will guide the new beginner in the selection and preparation of his land, and in the cultivation of the cuttings the present season; and in future numbers we will continue the subject in time for the further progress of the vineyard.

The grape is a native of our soil, and is found wild in some of its varieties from the 45° of latitude in the north, to the southernmost limits of the United States. The cultivation of some of these varieties is destined soon to become the most important branch of horticulture in the great Valley of the West. It has been cultivated with much success and profit in the vicinity of Cincinnati, for a number of years past, and its cultivation is now constantly extending as fast as the supply of cuttings and plants will admit.

Unlike most fruits, the grape is formed upon shoots of the same season's growth, and hence, it is much less liable to be cut off by spring frosts than those fruits whose buds are formed the season previous, like the Apple, Peach, Pear, &c.

In the volcanic and granitic soils of Europe and the islands of Madeira the vine flourishes most luxuriantly. Besides the dry, porous character of these soils, they contain a large proportion of *potash*, which, from the analysis of

the grapevine and its fruits, they are found to abound. Our Western soils contain a sufficient supply of this material to produce a fruitful and vigorous growth, provided the situation is well chosen and the soil properly prepared.

POSITION AND SOIL.

A hill-side, with a Southern or South-eastern aspect is preferred. Near Cincinnati many very precipitous hills are planted with the vine to the best advantage, but they often require a considerable outlay to bench or terrace the ground to avoid washing. These terraces are formed of stone, if convenient, and if not, turf is employed to sustain the embankments. A level surface should be avoided if possible, unless the soil is of a light, dry, porous character;—level hill tops are preferred to lower level lands, because they are generally less affected by excessive wet, and in spring and fall the vine is not so liable to be injured by frost. A limestone soil, rather dry and porous, or a gravelly, loamy soil is preferred; a cold, heavy, clay soil is the most objectionable. We have seen vineyards upon level lands of dry open soil that have succeeded well; but the plants should be set something wider apart than when planted on a southern hill-side.

PREPARATION OF THE GROUND.

The most important part of vine growing is properly preparing the ground; and owing to the high price of labor in this country it is almost always imperfectly done. In all soils suitable for a vineyard, it is better to prepare the ground in the best possible manner, regardless of the cost, than to neglect it, or to half do it. In those vineyards which have come under our own observation, where the ground has been most deeply and thoroughly trenched, the increased yield has been many times equal to the extra cost of the work, to say nothing of the greater durability of vines in a well prepared soil.

The grape, in this country, is more liable to injury from rains in the month of June than from any other cause. At this period generally, we have an excess of rain, which often causes great injury to the grape by rotting; this injury is increased in proportion to the tendency of the soil to retain an excess of water. If the soil is of a clayey, retentive character, it should be underdrained. We believe that experience will soon teach us that the grape in *all soils*, not absolutely dry and sandy, will yield the most profitable return when thoroughly underdrained.

The subject of underdraining is now attracting the attention of some of our best farmers, many of whom are expending more than the

cost of their lands in laying drain-tile; some of these have laid from ten to thirty miles and upwards of tile upon a single farm, and for the ordinary crops of wheat, &c.; and the advantages gained by an increase of crops, in one or two years, have, in some instances, more than equalled the whole cost of draining.

Although underdraining removes the excess of water from the soil in times of heavy rains, yet, these drained soils are so improved in their mechanical texture that they will withstand the blighting effects of a dry season much better than undrained soils.

If the soil is of such a character as not to require draining, in no instance should deep and thorough trenching be neglected. A vineyard, properly trenched, and well managed in after years, will yield large crops of excellent fruit, while one planted upon untrenched ground, or upon ground but half trenched, will yield but indifferent crops, and in a few years will fail altogether.

In many parts of Europe the same vineyards last for years. The custom there, is to trench the soil to the depth of three or four feet, and in some instances, even to a greater depth than this, and to manure well the surface and, to apply dressings of gypsum (Plaster of Paris). The ground for a vineyard is there usually prepared in this way and cultivated in some annual crop for a year or two, or sowed to clover before it is finally planted with the vine.

If the ground is planted with vines prepared only by deep plowing, the roots will seldom penetrate below where the soil has been broken by the plow, because the richer portions of the soil lie at the surface, and because the subsoil is so compact as to be impervious to the warming influences of the sun and the atmospheric gases. In a well trenched soil this is not the case. From the disintegration, the result of proper trenching of the soil, the warmth of the sun and air penetrate deeply, and encouraged by the richness of the inverted soil, the roots of the vine extend two or three feet below the surface, beyond the influence of the most severe drouth.

If the ground intended for a vineyard is poor, it should have a good dressing of manure the year previous, or receive a good coating of straw, ashes, &c.; lime and plaster are also often beneficial.

In the vicinity of large Western towns, where hog killing is carried on extensively, the bones of the heads and feet of the hogs, after they have been divested of the oil, by the steaming process, afford the very best material to apply

to a vineyard, the blood and any of the refuse of the slaughterhouses when incorporated with saw dust, tan bark, turf from the fence corners and road sides, or peat, or muck from the swamps, are also most excellent, and should never be suffered to go to waste. These materials should be spread upon the surface of the ground and be turned under and near the bottom in the process of trenching.

In ordinary soils, the usual mode of trenching, is, first to dig a trench, say four feet wide, and to the depth it is intended to spade and trench the vineyard, beginning upon the most convenient side. Into this first trench is then thrown the twelve inches of the surface soil from another width of four feet. To do this most effectually, the best steel spade should be used, inserting it as nearly perpendicular as possible, and all the loose earth taken by the first spading, should be gathered up and thrown into the trench, and then another spade deep of the subsoil is thrown into the trench upon the surface soil; this is covered to the proper depth, and the trenching continued until the work is completed. It is desirable to have the surface soil covered with the subsoil to the depth of one foot at least, but two is better.

The best time for trenching, is the winter, when the ground will become well settled before the season of planting arrives. In the vine-growing sections of Ohio, persons are found who will contract to trench land at from \$65 to \$75 per acre, two feet deep.

Other methods of preparing the ground are practiced, but the cheapest and most effectual of these is to use two plows, one of large size, drawn by a strong team, and this to be followed by another drawn by five or six yoke of oxen. This plow must be constructed expressly for the purpose. The only suitable ones we have ever seen are made in Cincinnati, by Garrett & Cottman. They will turn a furrow two feet deep; but we would not recommend it as a substitute for the spade.

We hope the expense of preparing the ground for a vineyard as we have suggested, will deter no one from engaging in the business. We give this as the best method, and one that in the end will prove the most profitable, but there are few persons in our country who have been thus thorough in the work.

As the season for pruning the vine and securing the cuttings will arrive before the issue of the March number of the Valley Farmer, we will conclude this article on the vine by giving some directions for preparing the cuttings.

The cuttings should be from healthy vines, and of the *last season's wood*. The part nearest the old wood, including the lower bud of the previous season's growth, is the best; the unripe and pithy portion should be rejected. The cuttings should be made with a sharp knife, cutting just below the bud at the bottom, but the top should be cut two inches above the upper bud.

As soon as the vines are pruned, the cuttings should be made, with as little exposure to the drying influences of the air as possible. Care should be taken to lay them all with the buds one way, as it is difficult for inexperienced persons always to determine which is the upper end. As soon as they are cut they should be laid in bundles of about one hundred each, and buried in the ground until wanted in the spring for setting.

☞ We fear the peach crop all over the country will prove a failure the coming season.—The intensely cold weather which has been experienced during the past month has probably destroyed the fruit buds.

THE VIRGILIA LUTEA.

[We are indebted to a worthy and intelligent friend for the following pleasant hit upon some of our American amateurs and gardeners, who will explore foreign regions and pay enormous prices for foreign trees and plants, when our own trees and forests abound with many more beautiful, of which they remain ignorant.]—Eds.

Mr. Smith, a Kentucky gentleman, whose name is not unknown to some Americans of other States, was traveling in England with his friend Jones. In the course of their rambles they visited one of the beautiful gardens that abound in that country. Among many objects that excited their admiration, they saw a beautiful tree with large pendulous racemes of flowers, resembling those of the locust.

"What a beautiful tree!" exclaimed Mr. Smith; "Look at it, Jones."

"Why," said Jones, "that is a locust tree."

"Oh, no," replied Smith, "it is not a locust; it has a smooth trunk, and the leaves are not of the same shape as those of the locust, but rounder. It may be the English locust, however. I must get some of the seeds to take to Kentucky. Let us ask the gardener about it."

"Sir," said Mr. Smith, politely accosting the gardener, "we are travelers from Kentucky, and wish to gain all the knowledge we can during our travels. We of course meet with many things here that are not found in Kentucky.—

We have just met with a beautiful tree which has reminded us of one in our own country, the locust. We have supposed it may be the English locust."

"Do you mean that tree with smooth trunk and greenish bark, covered with long racemes of yellowish-white flowers?"

"Yes," replied Mr. Smith.

"Why, that is an American tree!" said the gardener in surprise. "It is sometimes called here the American laburnum."

"Is it possible?" exclaimed Mr. Smith.—

"How has it happened that I have never seen it? Are you not mistaken?"

"Oh, no, sir; it grows in your own State a much more beautiful tree than it is in England, and is called the Kentucky Virgilia."

"What! you say it grows in Kentucky?"

"Yes, sir; the Kentucky river is in Kentucky, I believe," said the gardener, perplexed with a momentary doubt.

"Yes, Sir," replied Jones emphatically, his indignation being excited by the intimation of a doubt on the subject.*

"Yes, yes," said the gardener; "I am surprised that I should have expressed any doubt. Your not having seen the Virgilia, made me hesitate a moment. The seed from which that tree sprung, came from the banks of the Kentucky river. In that region the tree is called the Yellow-wood—sometimes the Yellow Locust, though it belongs to a different genus from the locust, or robinia."

"Well, I see that trees, like prophets, are not without honor, save in their own country," said Mr. Smith, who notwithstanding his ignorance of the Virgilia, was an intelligent gentleman. He had passed through college, and knew that tree is in Latin *arbor*, in Greek *dendron*—and was not even ignorant that it is in French *arbre*, and in German *baum*.

The gardener being pleased with Mr. Smith's gentlemanly manners, and the intelligent expression of his countenance, and feeling the botanical spirit mighty within him, now branched forth into a lecture, the chief points of which we here present to our readers without any nice regard to his language or sentiments..

"This tree was discovered by Michaux, the younger, and was introduced into France previous to 1809, and into England in 1812. Michaux classed it with the *Virgilia*, a genus named by Lamarck in honor of the poet Virgil, and gave it the specific name of *lutea* (yellow) from the yellow color of its wood. It was afterwards found to be distinct from the Virgilias, and Rafinesque formed of it a new genus, *cladrastis*,

and gave it the specific name of *tinctoria*. The generic name, *cladrastis*, is derived from the Greek words *clados*, a young branch or shoot, and *rasso*, to shatter or break in pieces, referring to the brittleness of its shoots. The specific name, *tinctoria*, is from the Latin *tingere*, referring to the coloring properties of the tree. It is called the *virgilia lutea* by Loudon and in the nursery catalogues generally; but Torrey and Gray and the later botanists give it the name of *cladrastis tinctoria*."

The word *cladrastis* not being very euphonious, we are glad to see that this beautiful tree is destined to retain in common speech, the beautiful name of *Virgilia*.

It is remarkable how often the word *cladrastis* is misspelled. In "Darby's Botany of the Southern States," it is spelled *cladrastis*. We see it sometimes in the form of *cladastris* or *cladastrus*.

The Kentucky *Virgilia* is from twenty to fifty feet high. Its leaves are pinnate, with seven to eleven alternate leaflets. It flowers in April or May. The seeds ripen in pods in August. It may be propagated by sowing the seeds in boxes or in the open border, immediately after they are ripe.

In the Horticulturist for July, 1847, there is some "arboricultural gossip," by J. Jay Smith, the present editor of the Horticulturist. In this he speaks of "a noble specimen of the Kentucky *Virgilia*, in the grounds of Mrs. Price, near Germantown." Its height was then 46 feet 8 inches, its stem measuring 6 feet 7 inches in girth at the ground, and 4 feet 1 inch six feet above the ground. In a postscript he adds:—"My *Virgilia* trees are this day in superb bloom. Why is this hardy western tree so rare?" To which Mr. Downing says: "Why, indeed?—We know nothing of the kind more charming than this fine tree."

N. B.

TULIPHERST, Ky., Jan. 27th, 1856.

* Jones was probably a relation of the Kentuckian who met Baron Humboldt in Paris, and afterwards gave an account of the interview. "I met him in company one evening," said he, "and I saw everybody giving way to him as if he knew all about geography. I thought to myself, never mind, old fellow, I'll pose you. So after a while, says I to him, Baron, can you tell me where BARGRASS is! And I'll pledge you my word and honor he had never heard of it!"

NOTE FOR THE BENEFIT OF BARON HUMBOLDT.—Bargrass, or, as it is sometimes more euphonesically called, Bargrass, is a creek, just above the falls of the Ohio, in whose waters the blood and portions of the entrails of hundreds of thousands of hogs are carried into the Ohio, thence into the Mississippi, thence into the Gulf of Mexico, thence into the Atlantic Ocean, thence into the maws of fishes or parts unknown.

THE CURRANT.

The currant is a native of Great Britain, and a moist, cool climate is best adapted to its successful culture; yet, in a suitable location and under proper treatment, it may be very profitably cultivated with us. It is an excellent fruit, and is in use for a longer period than any other summer fruit. It may be used in its green state for pies and tarts, and when stewed makes an excellent sauce; when ripe, a beautiful and wholesome jelly is made of it, surpassing that of any other fruit, and for wine we prefer it to the native grape.

CULTIVATION.

The currant in our gardens is seldom cultivated as it should be; the suckers are usually allowed to grow around the original plant until it becomes a mass of branches, almost wholly unproductive.

The best method of propagating the currant, is to cut the branches of the last season's growth just below their union with the old wood; make the cuttings ten or twelve inches long; with a sharp knife remove all the buds except three or four at the top of the cutting, which will prevent the future growth of suckers. This should be done in the month of February, or as early as the ground is in good condition to work.—Prepare a light mellow, or sandy soil by spading ten or twelve inches deep; then set the cuttings to about half their depth into the soil, and tread the earth firmly around them; a good mulching of old straw, leaves or other litter, will tend much to insure their growth. If the season is favorable, the following spring they will be sufficiently rooted for transplanting. To obviate the effects of our hot summer sun, a northern aspect is preferred, and if slightly shaded it is better. The soil should be rich and well pulverized; the plants should be set about three feet apart; the ground should be kept clean and well cultivated; if any suckers appear they should be removed, and no branches suffered to grow nearer than twelve inches of the ground, and the head pruned annually, preserving the form of a *miniature tree*, and the remaining branches should be shortened one-third or one-fourth the last season's growth, thus keeping up a supply of new bearing wood. The ground should have a top dressing every fall of fine manure or compost. This should be well spaded or forked under in the spring and the surface covered with leaves or old straw. This treatment should be repeated every year and will be fully compensated by an abundance of large fine fruit.

VARIETIES.

Recently there has been a number of new varieties introduced from England, some of which are of large size and of good flavor, but for general cultivation there are few kinds we prefer to the

Red and White Dutch.—These are productive varieties, of good size and mild flavor; the White is more mild and sweet than the Red, but we think hardly as productive.

Red Grape.—This is a good grower, and bears well; branches are quite long; berries large, light red; quite acid.

White Grape.—The largest of all the white currants; the bunches are large, the berries very large and closely set; pale, but quite transparent. The bush is not so free a grower as some other kinds.

Cherry.—This variety bears the largest berries of any of the currants; the bunches are short, but the fruit is very compact. It is a vigorous grower, and with close pruning is an abundant bearer.

May's Victoria.—Bunches of great length, berries above medium size, pale red, good bearer; fruit may be kept on the bushes a long time.

Champagne.—This is a quite new variety, and is probably a cross between the white and red—color of the fruit, light pink. It makes a handsome jelly.

Black Naples.—The black currants are not generally so much admired as the other varieties; but the Naples is the best of all the black currants; it bears large clusters and the berries are of large size. It is very productive in soils suited to it.

THE GOOSEBERRY.

The gooseberry is a native of the northern and middle portions of our country, but generally the fruit is of little value. The improved garden varieties have mostly been brought from England, and were originated in Lancashire, where their culture has been followed by a certain class of citizens with great enthusiasm, under the stimulating influences of periodical exhibitions and high premiums. The English catalogues now embrace over twelve hundred varieties. In our warm, dry climate there are but few situations where the the English varieties succeed well, on account of their liability to attacks of mildew.

CULTIVATION.

The directions recommended for the propagation and cultivation of the currant, apply also

to the gooseberry, except in consequence of its early growth in the spring, it is best to set the cuttings and transplant the bushes in the fall, as soon as the leaves have fallen.

VARIETIES.

The best English kinds which have succeeded only in our country in favorable locations, somewhat cool and moist, are the

Sheba Queen—which is the largest and best flavored of all the English varieties.

White Smith—is another large and excellent kind—very productive, and is often over an inch in length; color white and bluish, of very erect habit. To these may be added the

Roaring Lion and **Crown Bob**. But the only kind with which we are acquainted, worthy of general cultivation in the United States, is

Houghton's Seedling.—This is a new American variety, and was originated by Mr. Abel Houghton, of Lynn, Mass. It is supposed to be a cross between a native and an English sort, and what renders it most valuable is, that it never mildews. It is of a remarkably vigorous habit, and a great bearer. The fruit is of a pale red color, rather below medium size; of a good rich flavor. The berries grow in clusters, and may be gathered by the handfull. The bushes should be trimmed to a clean stem, ten or twelve inches high, and the bunches trained to a frame or trellis, and all sprouts from the bottom should be removed as fast as they appear. Good deep mulching is of the first importance to the complete success of this fruit.

FRUIT AGAINST PHYSIC.

Everybody, we believe, has given up the absurd notion that fruit is unhealthy, but we apprehend that the value of fruit as a preservative of health is not yet fully appreciated by the popular mind. We doubt if the medical profession is yet entirely awake to the important bearing of diet upon disease. The tendency of the profession in our day is certainly more to regimen, and less to medicine, than it was in former times, but it is a question whether their studies are not now directed too exclusively to the cure rather than the prevention of disease. A century or two ago scurvy was one of the great scourges of the human race; whole ships' crews perished by it during a single voyage; but since the potato has been introduced into universal use, this great plague of seamen is no longer dreaded. In the times when even the wealthy lived in England, during four or five months in the year, almost exclusively upon

meat, bread, and flour puddings, their medical writers state that gout and stone in the bladder were much more common than now when a vegetable diet is more generally employed. Now, if such happy results have flowed from the introduction of the potato and other vegetables into our winter bill of fare, may we not hope for a still greater improvement in the general health by a larger admixture of fruit with the substantial articles which compose our winter food? We venture to say there are few persons who have not had experience in their own cases of the improvement in health from the use of fruits. What dyspeptic has not felt new life in his system on the return of the fruit season, after a protracted winter and backward spring? The body, during the long abstinence, has lost certain constituents necessary to the healthy performance of its functions, and this loss the fruits of summer and autumn supply. The lesson taught by this is a plain one, namely—to preserve our fruits in a fresh state.

The old-fashioned mode of preserving will not answer; the nature and constitution of the fruits are changed by the process, and all their antiscorbutic virtues destroyed. The fruits must be fresh. It is gratifying to remark how general the practice of putting up fresh fruit for winter use has become, but we shall not be satisfied until it has become universal. The operation, in suitable cans, or in wide-mouthed jars, is simple and easy, and, with proper care, the preservation of the fruit, certain. If the more delicious fruits are cut off by frost, tomatoes may always be produced in abundance, and there is no season when we are not blessed with a bountiful crop of blackberries. There is, therefore, no excuse for the absence of fresh fruits from our tables at any season of the year. It is just as easy to keep them as to keep potatoes all the year round, and the saving in doctors' fees, to say nothing of the increase of comfort, would pay for the trouble ten times over. Does any one believe that we exaggerate the importance of a subacid and vegetable diet to human health? Let him observe the effect of succulent food upon our domestic animals in spring. Mark how the horse sheds his winter coat and is purged of those parasites which breed incurable disease. See how the cattle get new life and spirit. It is diet that does it—diet suited to the demands of their systems. Man, with hands to accomplish whatever his mind suggests, may provide himself a store of such articles of food as are adapted to every condition, and make himself independent of the revolutions of the seasons.

We have spoken of tomatoes and blackberries as always available; they are certainly the most valuable of our fruits. The old Portuguese physician who introduced the tomato into America insisted, that those who used it freely would never die of disease. He died, we believe, at a very advanced age, affording in his own person an illustration of the sanative virtues of this favorite fruit. We are persuaded that much is to be done for the preservation of human health by an improvement of our dietetic system, and mainly by providing for winter use all those fruits and vegetables which we so much wish in summer.

WINTER APPLES.

EDITORS OF THE FARMER:

I notice in your January number that you published my letter recommending the Jeneton or Rawle's Janet, as the best winter variety of apples. To ascertain what other varieties are equally as recommendable for Missouri, we ought to ascertain, besides the quality of the fruit, and its keeping properties—is the tree thrifty and hardy? Is it a regular annual bearer? Is it a great bearer? When does it put out in the spring? &c. And yet, all these statements would be vague, as we have as yet not adopted any standard to measure the qualities. I propose the Rawles Janet, as a variety cultivated and known all over Missouri and the West, I think, for this standard. If a variety is recommended, let us know, is the fruit larger or smaller than the Janet? Is it as fine in flavor? Is it as good a keeper? Is it as thrifty and hardy a tree as the Janet? Is it as prolific a bearer, and a regular annual bearer? Does it put out in the spring before the Janet? &c.

Your friend of Saline county speaks highly of the Green Newtown Pippin—of its flavor and keeping. The Yellow Newtown Pippin is, by others, valued higher than the Green. Downing says of the latter, "The tree is of rather slender and slow growth, and even while young, is always remarkable for its rough bark. When the fruit is not grown on healthy trees, it is liable to be spotted with black spots." But in Missouri it may be otherwise. Your friend would oblige the fruit growers generally, and myself in particular, by stating the merits of the Green Newtown Pippin, compared with the Janet and the Yellow Newtown Pippin.

Very respectfully,

JULIUS MALLINCKRODT.

Augusta, Mo., Jan. 9, 1856.

The Home Circle.

HOME.

There is one word tenderer, sweeter than all others,—the most affectionate word of human utterance; the word which carries the heart around the whole circuit of love at one sweep; what is it? Reader ask your heart. Is it husband, wife, father, mother, brother, sister, child, friend? These words are brimful of tenderness. But is there not one word that means as much as all of them; that mingles in its chalice of sweetness the richness of this whole family cluster? Yes, there is, and that word is *Home*. Ask the lone traveller, when far away in foreign wilds, for the word, the very utterance of which unseals the fountains of the heart, and he will tell you it is home. Ask the brave mariner tossed upon the deep, amid a thousand perils, where storms and billows and thunders move him not, what word will all unmove him and make him a very child; and with quivering lips and loving forms floating before his teary vision, he will tell you it is *home*. Who would not have a home, and live there thankful for its rich enjoyments? But to have a home is something more than to have a staying place,—a place where one can eat and sleep, and say he has a right against all the world; where no invading foot may tread; where none may venture to dispute authority with its lord. Though all these prerogatives and privileges belong to home, they do not constitute that place and condition of the heart which is meant by the word home in its high and proper sense. A poet has said, "Tis home where the heart is." And there is much significance in this beautiful expression. Where the heart's dear ones are, where it loves to linger and repose, where associations cluster sweet with beautiful memories, where hopes in a bright train come tripping and singing of "a good time coming," of happy days and love-lit faces yet to be enjoyed, where sweetness breathes as naturally as fragrance from a wild flower,—there, there is home. 'Tis where the heart is. It is true, home is a *place*: but every place is not a home. And every place which is called home is not home. The world is full of staying places, but not so full of homes. There is many a gilded palace and seat of wealth, many a house of luxury and place of worldly comfort, that is a world-wide distance from home. People live there and shine and smile, but are far away from home. Their hearts long and pine for their homes, even if they are but humble cottages.

Where affection rears its cottage or palace, prepares the frugal meal and smooths the pillow of rest, where kind words are always spoken, and good offices always performed, where forgiving love and weeping sympathy are the guardian house-hold gods, there is home. It is a place which rudeness would be ashamed to enter; where an unkind word would be like a clap of thunder in a clear sky; where the impulses of passion are unhallowed intruders; where impatience, petulance, coarseness, vulgarity, reproach, slander, and all kindred evils, are like hawks in a dove-cot or wolves in a sheep-fold; for where such dwell home does not stay. They never dwell at home. When they are in our dwelling-places, they turn out home. When they come in at one door, home goes out at the other. Into the heart's home they cannot intrude.

Home, then, is affection's constant dwelling-place.

HOW TO READ THE FARMER.

"Hoigh ho, from the Post Office! Here comes the *Farmer*! Yes, bright and clear, and up with the times. What is in it? Come, Betty, clear away the table. John, bring in the evening wood. Put all things in order, children. Sally, get a candle. Now draw up your chairs; make a circle. Mother, keep the baby quiet.—I can see good titles all along these pages. Yes, the editors have worked their brains well this time, and served us up a fine dish. Now let us eat." Thus the husband and father gathers his family around him in the evening to read to them the *Farmer*. He does not moodily pour over its pages alone and require all the rest to keep silence just for him to read to himself. He wishes the rest to enjoy what he reads and profit by it. He wants his wife to know what he knows. He is anxious that his children shall improve. He would have his whole family enriched with the contents of the new paper. So he gets all ready and reads to them. Some ask an occasional question; some laugh at the queer ideas; some rejoice in the good thoughts; some object to the new ideas; some think they could beat some of the articles; and so they go on reading and talking of what they read till bed time comes; then the *Farmer* is laid on the shelf till the next evening. So they read and enjoy and profit by what they read till the number is read through, article by article, advertisements and all. Then they think and talk of what they have read till the next number comes. This they devour in the same way. So they go through the year, and at its close the twelve numbers are carefully gathered up and sent to the book-binder and soon they come home a

neat volume for the library, preserving all it has gathered through the year for the future use of the family.

FARMERS' GIRLS.

We have long since said that the best wives in the world are made from farmers' girls. We believe it true. Not but that many mechanics', merchants' and bankers' girls make good wives and excellent women. But the rule is that farmers' girls are healthier, fresher, fairer, more useful and sensible than any other class of young women. What is a girl good for that has no health, no vigor of body, whose waist is like a wasp's, whose lungs are cramped into half their proper size, whose spine is crooked and diseased, whose nerves are weak as a spleeny old woman's, whose physical organism is so weak and unstrung, that every wind gives her a cold, every change in the weather a neuralgic attack, every accident a hysteric fit, and every spider that sets foot in her pathway a frantic terror? What is a girl good for that has no useful information, whose hands can serve no useful turn, can neither make bread nor butter, nor clothes, nor wash, nor nurse, nor mend?—Wives live to some purpose, or ought to. Theirs is a great mission. They have a field to occupy. They have noble service to humanity to do.—They have to preside over the interests of the thousand homes that dot our country. The dress, the comfort, the taste, the health, the happiness, the intelligence, the virtue of our homes are not a little in their keeping. All the interests that cluster around the fireside are confided to them. Not the politicians at Washington, not the professors in our colleges, not our men of commerce in our seaports, not the bankers in our cities, not the mechanics in our shops, not the men of our professions, not even our ministers of the Gospel, have committed to them a grander or a holier charge, or have in their keeping interests of greater importance than the wives of our country. Our civilization, our intelligence, our virtue, our progress in all that is great and good, depend as much upon our wives as upon any other class of community. They should, then, be healthy, strong and useful. They should know how to do something that will be of service to their families. To cook, to wash, to make, to mend, to pickle, to preserve, to cure, to nurse, to instruct, to please, to bless, to entertain, to serve, to encourage, to cut, to knit and sew, are some of the offices devolving upon a wife. If she knows not all of these things she must fail in some of her duties. If she cannot put her own hands to these services

she cannot fulfill her mission. To do these things she must be well stocked with common sense and useful information. To embroider, to finger a musical instrument, to paint, to draw, to read French and nurse flower-pots and lap-dogs, is no part of a wife's mission. To go into hysterics over the last novel, to weep over a newspaper doggerel, to study the fashion plate, to feast on the Lady's Book as though it was solid food, to snuffle over love-stories and be delighted with coxcomb literature, are accomplishments of a very questionable character in a wife. A half a grain of common sense sprinkled into a few hours of useful occupation is worth more than all of them. And because farmers' daughters are freer from these fooleries, are sounder in health, and are trained to more useful employments, is the reason why, as a general rule, they make better wives. All true accomplishments are to be prized; but the first and best and ever-to-be-esteemed accomplishment is to be useful. This always makes one agreeable, always makes one honored.—When usefulness is joined with intelligence, virtue and graceful manners, it consummates the character of a good wife.

YOUNG MEN PAPERS—NO. 2.

Young men, what are you? In the last month's paper, we asked Who you are? Now we ask, What you are? We ask it first in relation to your *character*. What are you in character? Men differ in character more than in looks—more than in the color of their skin—more than in any outward characteristic. Some men have fair characters; others have foul; Some men have soft characters; others hard. Some have sweet characters; others sour. Some have beautiful characters; others have ugly ones. Characters take every form. They are sharp and angular. They are flat and thin.—They are round and plump. They are three-cornered and fragmentary. They are smooth and harmonious as a circle or a globe. So they take all colors. There are white characters and black; red characters and gray. And there are mixtures of all colors. Then there are twisticle characters; indiarubber characters; cast-iron characters. There are fiery characters, milk-and-water characters. Among them all it is the young man's business to determine what kind of a character he possesses; whether good or bad, black or white, beautiful or deformed.—Then he should determine wherein it is deficient, bad, or wrong. He should study its faults, its excellencies, its contrasts. What is wrong,

should be corrected; what is bad should be improved; what is deformed should be made beautiful. A man's character is himself. He is measured, weighed, known by that. It is his only possession that he can call truly his own. It is what makes or unmakes him. If his character is right, he is right; if it is wrong, he is wrong. He lives in his character. Outside of this he is nothing. Without it he is but a mere shadow. Whatever we think or say of a man, we say of his character. If we think him good, or call him great, or believe him noble, high-minded, brave, just, it is only because we ascribe these things to his character. His character is his own. It is the product of his own workmanship. He can make it what he will. A man is to be honored for a good character and censured for a bad one, for he made his own character in no small degree. If a man is a man, he will have his character what he wants to have it. He will be what he wants to be. A young man is making his character. He is an artist in his studio. He is forming that by which he is to be known. To form that character is the greatest work of youth—the greatest work of life, if we form it well. It matters but little about a man's body, whether it be beautiful or not, if it is only healthy. It is not the body that makes the man. The stature may be noble, the eye may be flashing, the forehead high, the hair glossy as a raven's wing, the complexion may vie with the rose and lily for beauty, the teeth with the pearl for whiteness, and still the character be so mean, so base and destitute of manly qualities, that his very presence creates a loathing in all good society. A noble form and manly beauty are to be admired and prized when they are dignified and honored by a good character, but not otherwise. Fine talents, rich powers of mind, large gifts of thought and speech, are good and grand, when united with a good character. But when linked with a bad character they are truly objects of dread. Such powers work large fields of ruin among men.—One talented bad man is worse than a score of bad fools. The greater a man's talents, the worse it is for him and the world, if his character is bad. So great learning is to be prized. It is a thing of vast value, if it is connected with a righteous, manly character. But if joined with a mean character, it only adds force to its meanness, and makes it capable of doing the greatest evil. Talented rascals are infinitely more to be feared than simple ones. A smart knave is a thousand fold worse than a stupid one. Great talents enable a bad character to do evil on a large scale. A stupid mind with a

bad character only makes its badness more disgusting. So wealth and worth are grand together. But wealth without worth makes a man hideous indeed. It gives him power to commit gigantic frauds and grind the face of the honest and the poor. Nothing is valuable without a good character. This is the first, the last, the richest and greatest thing. This is the sun.—Nothing is beautiful without its light. Nothing flourishes without its warmth. Nothing is valuable without its influence. This every young man should know. He can get no more important knowledge. Knowing this, he may feel how great is the work in which he ought to be engaged. He is forming some kind of a character. He cannot live without. His very thoughts will work out a character for him. His actions will help mould it. He cannot avoid having a character. The question with him is, what kind of a character shall it be? It is the *kind* that is under his control. He can choose what he will be, whether an honorable or a base man, whether a nobleman or a rascal, a gentleman or a rowdy.

When a young man has learned what he is, the next question is, what will he be? What kind of a character will he possess? His character is a thing he must carry always about him. He cannot lay it off and put it on at pleasure. He must bear it always about him. If it is good it will be no burden. If it is bad it will weigh him down like a mountain weight. It is just as easy to be a good man as a bad one. It is just as easy to be wise as foolish. On the whole it is far easier. Wisdom is everywhere to be found, and her paths are pleasant and peaceful. It is easier to be an honest man than a knave. The honest man goes smoothly and respectfully through life. The knave is met with trouble at every corner. Every man's hand is against him. If a man speaks the truth he can stand by it, and it will stand by and sustain him. If he speaks a falsehood he must tell twenty more to get out of that, and some of them will be sure to reveal the lie. A good character is a man's fortress. It will guard him from harm. It will surround him like an impregnable bulwark. It will give him a name which in itself will be a fortune.

What will you be? This is the question, young man. You have noble examples around you. The great, the wise and the good invite you to imitate them. Their lives are before you. Their biographies will teach you noble lessons. Their virtues are for your imitation, choose your pattern. Fix your eye on your mark. Begin at once to be a man; and begin

in good earnest. No youth is less interesting for being manly. Lay the foundations of a faultless character and build up the superstructure as fast as possible. The world needs some brave, noble young men. They are the hope of the future. Shall they be found? *

THE WOMEN OF PERU.

Of all the Spanish customs of the olden time, devotion to women is preserved in perfect purity only in Peru. The loving husband, with his ardent, poetic imagination, delights in being the slave of his lady. The fair senoras make the largest demands on gallantry, and the slightest lack of watchfulness often excites resentment which will not be appeased. In company, a gentleman approaches a woman only when he can show her some little attention. Above all, her right is supreme to the first places and the strongest expressions of devotion. People do not say here as elsewhere, "I have the honor to present my compliments to you," or, "How do you do?" but, "Senora, I kiss your feet."

"Proposing," in Peru, is very romantic. The suitor appears on the appointed evening with a gaily-dressed troubadour under the balcony of his beloved; the singer steps before her flower-bedecked window, and sings her beauties in the name of the lover. He compares her size to that of a palm-tree, her lips to two blushing rose-buds, and her womanly form to that of the dove. With assumed harshness the lady asks the lover: "Who are you, and what do you want?" He answers with ardent confidence: "Thee do I adore; the stars live in the harmony of love, and why should not we, too, love each other?" Then the proud beauty gives herself away; she takes her flower wreath from her hair and throws it down to her lover, promising to be his own forever.

DR. HALL'S WAY OF TREATING A BAD COLD

A bad cold, like measles or mumps or similar ailments, will run its course of about ten days, in spite of what may be done for it, unless remedial means are employed within forty-eight hours of its inception. Many a useful life will be spared to be increasingly useful, by *cutting a cold short off in the following safe and simple manner*. On the first day of taking a cold, there is a very unpleasant sensation of chilliness. The moment you observe this, go to your room, and *stay there*; keep it at such a temperature as will entirely prevent this chilly feeling, even if it requires a hundred degrees of Fahrenheit. In addition, put your feet in water, half leg deep, as hot as you can bear it, adding hot water from time to time for a quarter of an hour, so that the water shall be hotter when you take your feet out than when you put them in it; then dry them thoroughly, and then put on warm, thick woolen stockings, even if it be summer, for summer colds are the most dangerous; and for twenty-four hours eat not an atom of food; but drink as largely as you desire of any kind of warm teas, and at the end of that time, if not sooner, the cold will be *effectually broken, without any medicine whatever*.

DOMESTIC RECEIPTS.

TO MAKE GOOD RUSK.—Take a piece of bread dough large enough to fill a quart bowl, one teacup of melted butter, one egg, one teaspoonful of saleratus; knead quite hard, roll out thin, lap it together, roll to the thickness of thin biscuit, cut out with a biscuit mould, and set it to rise in a warm place. From twenty to thirty minutes will generally be sufficient. Bake them, and dry thoroughly through and you will have an excellent rusk to eat with your coffee. You can make them with hop yeast, and sweeten them, too, if you please; I use milk yeast.

ONE WAY TO COOK CHICKENS.—The following is highly recommended:—"Cut the chicken up, put it in a pan and cover it over with water; let it stew as usual, and when done make a thickening of cream and flour, adding a piece of butter, and pepper and salt; have made and baked a couple of short cakes, made as for pie-crust, but rolled thin and cut in small squares. This is much better than chicken pie, and more simple to make. The crust should be laid on a dish, and the chicken gravy put over it while both are hot.

CHEAP AND EXCELLENT CANDLES.—The following receipt I have tried twice, and it is all it is cracked up to be. I have no doubt that it would have been worth more than \$200 to me if I had known it twenty years ago. Most farmers have a surplus of stale fat and dirty grease, which can be made into good candles at a trifling expense.

I kept both tallow and lard candles through the last summer, the lard candles standing the heat the best, and burning quite as well, and giving as good a light as the tallow ones.—Directions for making good candles from lard: For 12 lbs of lard, take 1 lb of saltpeter, and 1 lb of alum; mix them and pulverize them, dissolve the saltpeter and alum in a gill of boiling water; pour the compound into the lard before it is quite all melted; stir the whole until it boils, skim off what rises; let it simmer till the water is all boiled out, or till it ceases to throw off steam; pour off the lard as soon as it is done, and clean the boiler while it is hot. If the candles are to be run, you may commence immediately; if to be dipped, let the lard cool first to cake, and then treat it as you would tallow.—*Fulton (Mo.) Democrat.*

SOFT GINGERBREAD.—One cup of butter; two of molasses; one of milk; three eggs; one table-spoonful of ground ginger, and one tea-spoonful of saleratus; beat it well, and bake in a quick oven.

DIRECTIONS FOR A SHORT LIFE.—We copy the following directions for a short life from an old almanac. We doubt not they will prove as efficacious as any doctor could desire.—1st, Eat hot bread at every meal; 2d, Eat fast; 3d, Lie in bed every morning till the sun is two hours high. If the case should prove stubborn, 4th, Add the morning dram.

Editor's Table.

TO OUR FRIENDS.

We return our heartfelt thanks to our friends all over the West, for the cordial support which they have given to our journal. New subscribers are daily pouring in from all quarters—not singly only, but in large clubs. Every neighborhood contains its whole-souled and philanthropic men who cheerfully lend their influence to every good cause. To them are we indebted for the large increase in our list of subscribers. They have, without solicitation, generously become agents, and devoted their time to forming clubs for our journal. Such noble efforts are in the highest degree praiseworthy. We shall endeavor to make the *Valley Farmer* worthy such men and such a cause. We hope every farmer of the West will consider himself an agent for our journal. We appoint you all agents, and the larger our subscription list the better journal shall we give you. Friends, what say you to 20,000 subscribers to the *Valley Farmer* this year? With a little effort, on the part of each subscriber, this number could easily be obtained.

We repeat our thanks to those who have aided us, and ask for the continued co-operation of the friends of agriculture, in the support of our journal, feeling assured that they will find the *Valley Farmer* just such a work as they need, and a powerful advocate of improvement in every department of agriculture.

We have sent the first number of the *Valley Farmer*, as a specimen of the work, to many of our friends, and the friends of Agriculture, throughout Kentucky, Indiana and Tennessee, and so far as we have heard it has been received with unexampled favor. Of this we have the most gratifying evidence, not only from numerous letters received, approving the work, as just what has long been needed by the farmers of this portion of the great West, but in the more substantial form of approval, through the special efforts of many of those friends in procuring large clubs of subscribers in almost every neighborhood—to all of whom we tender our most hearty thanks.

TO THE READERS OF THE VALLEY FARMER.—The second number of the work is before you. We wish you to examine carefully each article that it contains. We think you will agree with us, that as an agricultural periodical it has no superior either in the East or the West.

DELAY.—In establishing a work of this kind, with every material new from the beginning, some little delay has occurred in mailing the first number. We now have everything in perfect working order, and in future our subscribers may expect to receive their numbers punctually within a few days of the first of every month.

The pursuit of Agriculture is the most important that occupies the attention of the people of the West. It is one that requires the light of science and improved practice to guide it. The present is the great age of improvement—and in no department of industry has there been greater advancement, within the last ten years, than in agriculture, and every farmer should possess the means of obtaining a knowledge of these improvements, and to furnish these means is the object of the *Valley Farmer*. We love agriculture in all its departments—and we have ever loved it; and to promote its interests we have labored for years through the columns of the *Louisville Journal*, as its Agricultural Editor, without a farthing's compensation, and we have labored years longer for a very inadequate consideration. We now propose, through a more appropriate medium, to devote the entire energies of our body and mind to the work and render the *Valley Farmer* worthy of a place in every farm-house in the West. We intend that each number shall be worth to any farmer the subscription price for a whole year. For the benefit of the great farming interests of the West we earnestly solicit all friends of Agricultural improvement to lend their aid in its circulation.

IVERSON GRASS SEED.—We have had numerous applications from our subscribers for this seed. We do not know of any to be had in the West. Can the American Farmer inform us whether any can be procured in Maryland?

REPORT OF THE FRUIT COMMITTEE OF THE KY. HORTICULTURAL SOCIETY FOR 1855.—We acknowledge the receipt of this valuable report, and would have been happy to have laid it before our readers this month if our space had permitted. We will publish it in the next No.

A LIST OF MARKET FRUITS FOR THE WEST, WITH DESCRIPTIONS OF FRUIT, &c.—We have prepared, with great care, a list of fruits adapted to the latitude of Missouri and Kentucky, which we will publish in the March No. of the *Valley Farmer*. The crowded state of our columns precludes its publication this month.

ST. LOUIS AGRICULTURAL AND MECHANICAL ASSOCIATION.

An act was passed at the late session of the Legislature of Missouri, to incorporate the St. Louis Agricultural and Mechanical Association. The following named gentlemen were appointed by said Act, the first Board of Directors of said Company, viz: Andrew Harper, John O'Fallon, Martin Hanna, W. H. Dorsett, Robert Martin, Olly Williams, John Sigerson, A. Christy, John Chambers, John Hartnett, T. Grimsley, H. J. Bodley, H. C. Hart, T. T. January, J. Renfrew, J. Withnell, G. B. Allen, J. Sappington and W. C. Jenks.

There will be a meeting of the Board on the first Monday of February, at 12 o'clock, at the office of J. R. Barrett, Esq., No. 80 Chesnut street, St. Louis, for the purpose of organizing the Association. We hope that every member of the Board will be present at this meeting.—A very important trust has been committed into their keeping and we hope to see that trust properly discharged.

It is to be deeply regretted that so little interest has been manifested by the citizens of the city and county of St. Louis in the formation of Agricultural, Horticultural and Mechanical associations. While Louisville, Cincinnati, Chicago, and in fact, every other city of any note whatever, can boast with pride of these societies—the city of St. Louis, containing a population of over 120,000 inhabitants, and in the centre of the richest agricultural region in the world, cannot name a single society of the kind! It remains with the present Board of Corporators to say whether this shall be the case longer.—The gentlemen appointed by the Act are among our wealthiest and most influential citizens.—They have the power to establish the society upon a permanent basis if they will but exercise that power. But this cannot be done without the means. To purchase and prepare our Fair Grounds a large outlay of money will be required. This money must be raised either by private subscription or by subscribing for so many shares of the capital stock of the Company.—We believe the latter is the plan generally adopted by such societies. Our merchants, the most liberal in the world, will generously aid us in the undertaking. Let us, friends, all put our shoulders to the wheel and we shall have such a society—such agricultural, horticultural and mechanical exhibitions, as we can point to with pride. They will do credit to our city. We must keep up with those around us, and we ought to strive to surpass them. A step has been

taken in the right direction, and that it may be successful is our sincere wish.

AGRICULTURAL FAIRS IN MISSOURI.

We expected to lay before our readers this month, the agricultural bills which were passed by our Legislature at the late session. Early in the month of January we wrote to the Secretary of State to forward us copies of the acts; but at the time of going to press, they have not been received. In our next number we will furnish our readers with copies of these acts, or give their substance.

We have been informed that two bills, having reference to agriculture, were passed. We have been made acquainted with the provisions of but one of these bills, and may have been misinformed in regard to some of its features. It provides for dividing the State into five districts, and for holding fairs in each, which are to be located in the Northeast, Northwest, Southeast, Southwest and Central portions of the State.—Each district contains a certain number of counties, which are named in the bill. A Board of ten Directors is appointed for each district, which Board, when organized, constitutes a body corporate, with the usual powers of such.

An annual appropriation of five hundred dollars from the State Treasury, is made to each district, for five years—the central, or Boonville district, however, to have \$1000 the first year. The Board of Directors of each district are to determine in which county the fair is to be held. A President of each Board of Directors was appointed by the Bill, and the several Boards are to meet at such time and place as the President shall name, of which meeting the Directors are to be duly notified.

We would here suggest the propriety of so arranging the time for holding the fairs in the several districts, that persons who desire, may attend them all. For instance, let the fair in one district be held the first week of October, and in another district the second week, and so continue holding a fair in each district each subsequent week. This will enable persons to attend the fairs in all the Districts.

We hope the Boards of Directors of the several districts will have some understanding in reference to this matter. Many persons have agricultural implements, stock, &c., which they would be glad to exhibit at each district fair, but unless some arrangement of the kind we have mentioned, be effected, they will be precluded from so doing.

The following gentlemen, we believe, were

appointed Presidents of their respective districts: Northeastern—Wm. Carson, President; Northwestern—A. W. Doniphan, President; Southeastern—N. W. Watkins, President; Southwestern—Marcus Boyd, President; Central—M. M. Marmaduke, President.

A very important and responsible duty devolves upon the gentlemen who have been appointed Directors—and we hope and trust that it will be satisfactorily performed.

✎ We frequently send a number of the *Valley Farmer* to persons who are not subscribers; we wish them to give it a careful examination, for we think they will find it just such a work as they and their neighbors need; and if they will make a little effort and obtain the names of five persons with their own the six copies will cost them but five dollars—or if they obtain twenty names they will receive twenty copies for fifteen dollars, and one copy to themselves free, which is less than seventy-five cents each; if it is not convenient for them to do this, we respectfully request them to hand the number to some of their friends who would most likely solicit subscriptions of their neighbors.

✎ We regret to learn that several mistakes occurred in making out bills against the subscribers, by Mr. Abbott, which were sent out in the December No. of the *Valley Farmer*. Where any such have occurred, we are assured, that Mr. Abbott will cheerfully rectify them. By the terms of agreement between us and Messrs. Woodward and Abbott, in the purchase of the *Valley Farmer*, all the accounts due the *Farmer*, up to the commencement of Vol. 8, accrued to Mr. Abbott. Therefore, we are not in any manner interested in the old accounts of the *Valley Farmer*, and where mistakes have been made, we do not wish to be held responsible for them! We commenced square with all of our subscribers on the first of January, 1856, and shall keep our books in such a manner that no mistakes can occur.

✎ We are indebted to Hon. H. S. Geyer, of the U. S. Senate, for valuable public documents.

THE FAMILY CIRCLE, a weekly paper for husbands, wives, parents, children, brothers and sisters, has recently been started in St. Louis, by E. Abbott, one of the former proprietors of this Journal, at one dollar a year.

NEWS DEPARTMENT.

THE SEAT OF WAR.

We give the news from the Crimea so far as our space will admit. The Russians made another unsuccessful attack on the allies but were repulsed, after about an hour's fight, leaving in the hands of the victors some thirty prisoners. It is rumored that Kars had fallen by famine, and was in the hands of the Russians although no official account of the matter has appeared. Warlike operations have been generally suspended for the winter. At Inkerman a distressing accident had occurred, by the blowing up of a French park of artillery. About one hundred French troops were wounded and thirty killed. Of the English, one hundred and thirty-seven men were wounded, and one officer killed. Three magazines exploded, containing large quantities of powder, charged shells, cartridges, &c.

Omar Pasha with his Turkish troops, had achieved a glorious victory by forcing a passage at the river Ingour, in the face of the Russian batteries, on the opposite side, and compelling the Russians to evacuate their batteries. The skill and courage displayed by the Turkish commander have entitled him to great praise.

It is rumored that peace is about to be restored.

No Speaker has yet been elected by the House of Representatives, and as a matter of course the House is yet unorganized.

The President, however, sent in his message which was received and read in the Senate on the 31st Dec., but the House refused to have the same read. Our readers, we presume, ere this have read the message, and our space will not even permit us to give a synopsis of it. The balloting for speaker has not materially changed from the commencement. The three most prominent candidates are Wm. A. Richardson, of Illinois—N. P. Banks, of Massachusetts—and H. M. Fuller of Pennsylvania.

The far-famed Fanny Fern, author of Ruth Hall, Rose Clark, &c., was recently married to James Parton, of New York, author of the memoirs of Horace Greely.

✎ Jenny Lind is in England. A series of oratories are to be given in Exeter Hall, in which she is to take part.

✎ Lola Montez tried to stab the mate of the ship in which she took passage for Australia, because he kicked her poodle.

✎ Bayard Taylor, it is said, has one hundred engagements, at fifty dollars a night, to deliver his lecture on the Philosophy of Travel.

✎ Captain Ericson is still engaged in perfecting the caloric engine at the DuLameter factory on Thirteenth Street, New York. He is confident of final success.

✎ The Legislature of Vermont has appropriated \$2,000 for the erection of a monument over the remains of Ethan Allen.

✎ The Clerks in the telegraph office at Berlin, Prussia, are locked up during the time of business, and for two or three hours afterwards, so that they may not be able to betray the secrets of customers.

✎ Potatoes, which were not cultivated in Switzerland till the last century, have become of great importance; the annual growth is 19 millions of bushels, worth 34c. per bushel, and they are of excellent quality.

B An edition of the Bible has been published at Nashville. The Southern Christian Advocate thinks it the first that has been published south of the Ohio and Potomac rivers.

B The private correspondence of Henry Clay, edited by Calvin Colton, has just been published by A. S. Barnes & Co., N. Y.

B The bones of an antediluvian monster were recently discovered in excavating a deep cut on the Jackson and Canton (Miss.) Railroad. The Canton Citizen says 35 feet of an animal including the head, had been taken up, but the "end is not yet."

FARM PRODUCT MARKETS.

LOUISVILLE MARKET.

Louisville, Feb. 26.

FLOUR.—We quote at \$7 25 to \$7 50.

GRAIN.—Wheat, \$1 30 to \$1 35 from wagons. Corn, 30 to 35c. in the ear from wagons. Sales from store—ear and shelled—33@35c. Oats, 25@27c. Rye, from wagon, 60c.—from store 65@70.

BEEVES.—A good supply in market and ranging from 3@4c gross, as to quality.

SHEEP.—Demand light. Range from \$2 00@\$5 00 as to quality.

Hogs.—54@54c net. Market unsettled.

ST. LOUIS MARKET.

Sr. Louis, Feb. 26.

FLOUR.—Market unsettled. We quote country and city superfine at \$7 25 to \$7 50; fancy, \$7 50 to \$7 75; extra country \$8 00@\$8 50; extra city, \$9 60@\$10 00.

GRAIN.—Wheat, Nothing doing in the market, and we are unable to give any reliable price. Corn, we quote for mixed, 53 to 55c.; yellow and white, 56@60. Oats, 42@45c. Rye, 90@95c. Barley, \$1 40@\$1 60, as to quality.

Hogs.—Range from \$4 50 to \$5 00.

CATTLE.—We quote for good to choice \$5 00@\$6 50, lower grades from \$4 50 to \$5 50.

SHEEP.—\$2 50 to \$3 50, as to quality.

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ADVERTISEMENTS

To secure insertion in the Valley Farmer, must be received in our office, as early as the 15th of the previous month. See terms.

To Farmers and Gardeners.

Your attention is called to the Manures manufactured by the Lodi Manufacturing Company from the contents of the Sinks a Privies of New York City, and free from offensive odor, called

POUDRETTE AND TAFU.

Poudrette is composed of two-thirds night soil and one-third decomposed vegetable fibre. Tafu is composed of three-fourths night soil and one-fourth No. 1 Peruvian Guano.

These manures are cheaper and better adapted for raising Garden Vegetables and Grass, than any other in market. Can be put in contact with the seed without injury, and causes corn and seeds to come up sooner, ripen two weeks earlier, and yield one-third more than other manures, and is a Sure Preventive of the Cut-worm.

Two bbls. Poudrette, or 100 lbs. Tafu, will manure an acre of corn in the hill. Tafu 1 1/2 cents per lb.—Poudrette \$2.00 per bbl., or \$1.50 for any quantity over seven bbls., delivered on board vessel or Railroad, free from any charge for package or cartage. A pamphlet containing every information, sent postpaid to any one sending their address to

THE LODI MANUFACTURING CO.,
60 Courtland street, New York.



SIGERSON'S NURSERY.



The proprietors of this NURSERY, situated a short distance South of St. Louis, Mo., are prepared to furnish from their establishment a more extensive and better selected stock of

Fruit, Shade, Ornamental Trees and Shrubbery, than they have ever heretofore been able to supply, and feel no hesitation in saying that scarcely a demand can be made on them which they cannot supply of the finest quality of Trees, Shrubs and Plants, to enumerate which, would require a much larger space than could be allowed to advertisers, and therefore invite all in want of a supply, to forward their orders for Catalogues and Bills of Prices, which will be forwarded promptly to all postpaid applicants.

Parties intending to procure trees the coming Spring should send their orders forward as early as possible, so as to enable the proprietors to fill and deliver them at the earliest possible time in the spring.

All communications should be addressed to

JOHN SIGERSON & BRO.,
St. Louis, Mo.

Fruit and Ornamental Trees, Shrubs, Vines, Plants, &c.
No. 19 MARKET ST., SAINT LOUIS, MO.,

Has now become a Sale Depot of E. B. Coleman's
PEORIA NURSERIES and GREENHOUSES.

There can always be had at this place during the fall and spring, a good selection of Apple, Pear, Peach, Plum, Cherry and Quince Trees. Also Dwarf Pear, Dwarf Apple and Dwarf Cherry Trees, together with

GRAPE VINES, STRAWBERRIES,

Gooseberries, Raspberries, Currants, Ornamental Trees, Shrubs, Vines, Plants, &c., &c. DESCRIPTIVE CATALOGUES, containing prices, can be had by calling, or we will mail them, if requested by letter.

Our trees cannot be surpassed in Quality, Beauty or Thriftiness of Growth.

Orders will be promptly filled, securely packed, and delivered at any railroad depot or steamboat in the city. Specimen fruits kept constantly on hand. We can supply orders given for

OSAGE ORANGE PLANTS

and for Young Nursery Stocks.
Ja. 3m.] E. B. COLEMAN.